Scale: 5" / 100'
Measured Depth Log

Well Name	SHOOK 3-10-6CDH_Lateral		
Location	NWSE SEC 3 T1S R67W		
State	COLORADO	**County**	ADAMS
Country	USA	**Rig Number**	ESNSIGN 145
API Number	05-001-09981	**AFE #**	1700003
Geographic Region	DENVER-JULESBURG BASIN	**Field**	WATTENBERG
Spud Date	4/19/2017	**Drilling Completed**	7/8/2017
Surface Coordinates	SEC 3, T1S, R67W, 2058' FSL x 2094' FEL 39.9889398, -104.8671221		
Bottom Hole Coordinates	SEC 11, T1S, R67W, 357' FSL x 1375' FWL 39.971264, -104.871783		
Ground Elevation	5098'	**K.B. Elevation**	5109'
Logged Interval	7600' **To** 14148'	**Total Depth**	6548'
Formation	SHARON SPRINGS thru CODELL		
Type of Drilling Fluid	OBM - OIL BASED MUD		

Operator

Company PetroShare Corporation

Address 7200 S Alton Way
Englewood, CO 80112

Geologist

Name JOEY LUCE, GARY MYERS, SAGE BETTS

Company Terra Guidance

Address 1298 O Road
Loma CO 81524
(970) 260-5408

Color Coding

Oil	Condensate
Note	Core
Error	Water

ARE

e

Gas
Pressure
Seal

Rock Types

- LIMESTONE
- Chalk
- Marl
- SHALE
- Silty Shale
- Shaly Siltstone
- SILTSTONE
- Shaly Sandston
- SANDSTONE
- BENTONITE
- CEMENT
- UNKNOWN
- ANHYDRITE
- GYPSUM
- SALT
- SIDERITE or LIMONITE
- DOLOMITE
- CHERT
- COAL
- MARLSTONE
- CLAYSTONE
- SHALE GRAY
- SHALE COLORED
- CONGLOMERATE
- BRECCIA
- TILL
- TUFF
- IGNEOUS
- METAMORPHIC

Accessories

Fossils

- FOSSIL
- GASTROPOD
- ALGAE
- AMPHIPORA
- BELEMNITE
- BIOCLASTIC
- BRACHOIPOD
- BRYOZOA
- CEPHALOPOD
- CORAL
- CRINOID
- ECHINOID
- FISH
- FORAMINIFERA
- OOLITE
- OSTRACOD
- PELECYPOD
- PELLET
- PISOLITE
- PLANT REMAINS
- PLANT SPORES
- SCAPHOPOD
- STROMATOPOROID

Minerals

- ANHYDRITIC
- ARGILLACEOUS
- ARGILLITE GRAIN
- BENTONITE
- BITUMENOUS SUBSTANCE
- BRECCIA FRAGMENTS
- CALCAREOUS
- CARBONACEOUS FLAKES
- CHTDK
- CHTLT
- COAL - THIN BEDS
- DOLOMITIC
- FELDSPAR
- FERRUGINOUS PELLET
- FERRUGINOUS
- GLAUCONITE
- GYPSIFEROUS
- HEAVY MINERAL
- KAOLIN
- MARLSTONE
- MINERAL CRYSTALS
- NODULES
- PHOSPHATE PELLETS
- PYRITE
- SALT CAST
- SANDY
- SILICEOUS
- SILTY
- TUFFACEOUS

Stringer

- ANHYDRITE STRINGER
- BENTONITE STRINGER
- COAL STRINGER
- DOLOMITE STRINGER
- GYPSUM STRINGER
- LIMESTONE STRINGER
- MARLSTONE (CALC) STRG
- MARLSTONE (DOL) STRG
- SANDSTONE STRINGER
- SHALE STRINGER
- SILTSTONE STRINGER

Oil Show

- ORGANIC
- PINPOINT
- DEAD
- VUGGY
- EVEN
- QUESTIONABLE
- SPOTTED STAINING

Porosity

- EARTHY
- FENESTRAL
- FRACTURE
- INTERCRYSTALLINE
- INTEROOLITIC
- MOLDIC

Engineering

- BIT
- CASING
- CONNECTION (LE
- CONNECTION (DO
- CONNECTION GA
- CORE - LOST
- CORE - RECOVER
- DST INTERVAL
- FAULT

Other Symbols

FORMATION TOP

GAS SHOW

MN DEPTH

NORMAL FAULT

OIL SHOW

OVERTURNED STRATA

REVERSE FAULT

SIDEWALL CORE (LEFT)

SIDEWALL CORE (RIGHT)

SLIDE

SURVEY

TRIP GAS

WIRELINE TESTED - LEFT

WIRELINE TESTED - RT

Rounding

A ANGULAR

R ROUNDED

SR SUBANG

SRND SUBRND

Textures

BS BOUNDSTONE

C CHALKY

CX CRYPTOXLN

E EARTHY

FX FINELYXLN

GS GRAINSTONE

L LITHOGRAPHIC

MX MICROXLN

MS MUDSTONE

PS PACKSTONE

WS WACKESTONE

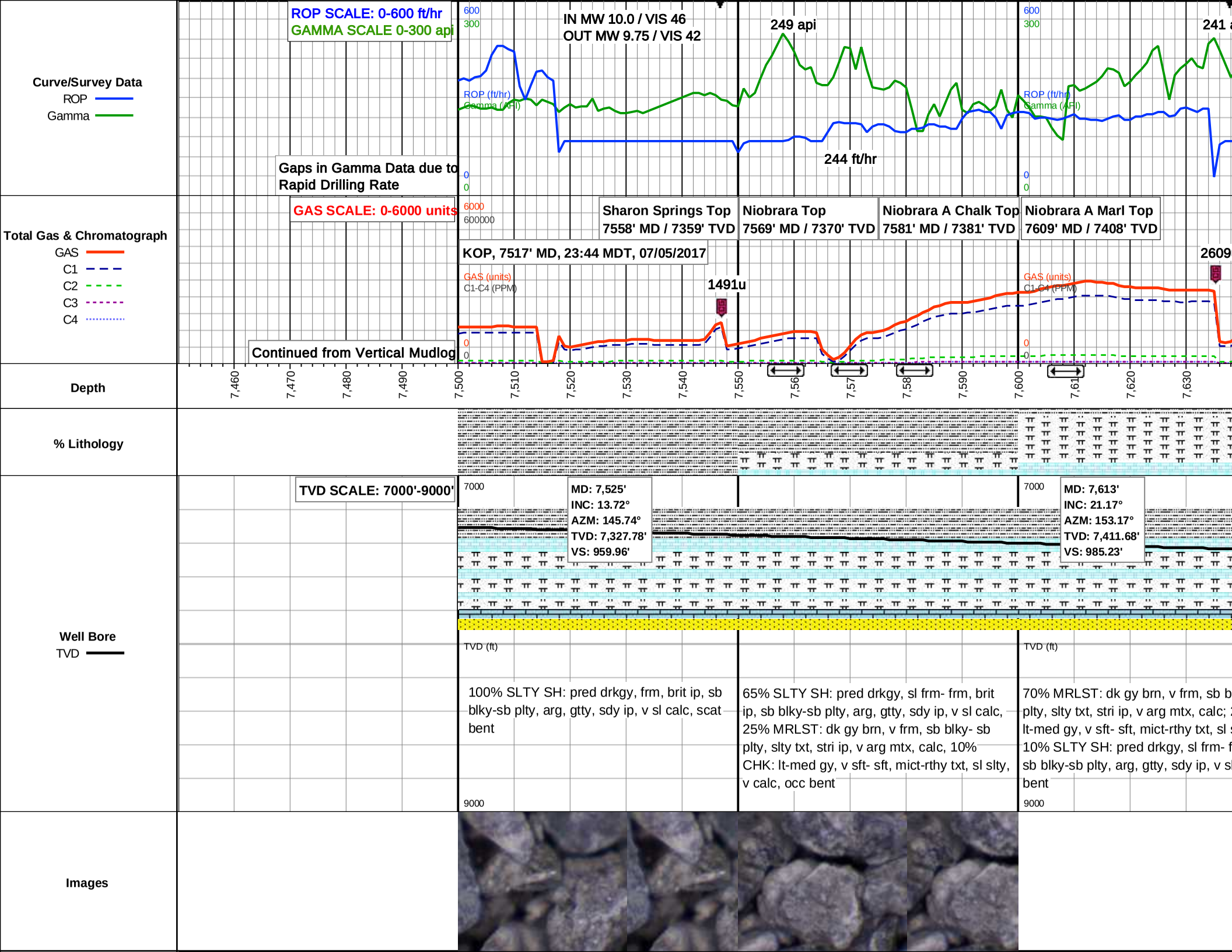
Sorting

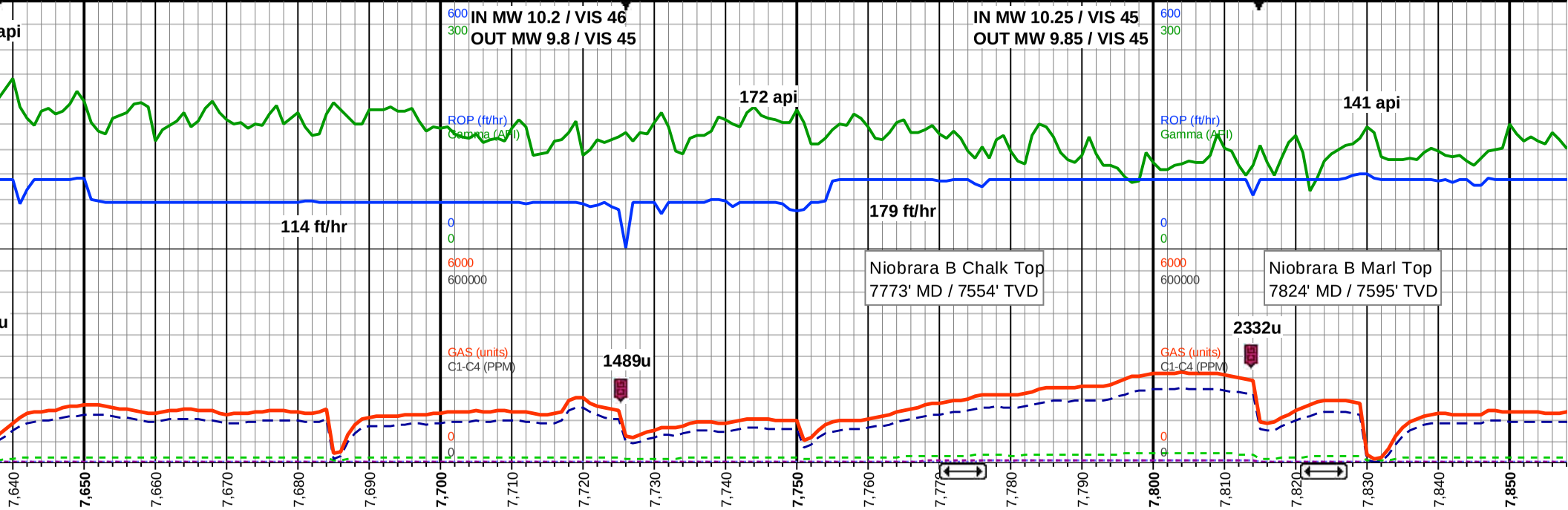
M MODERATE

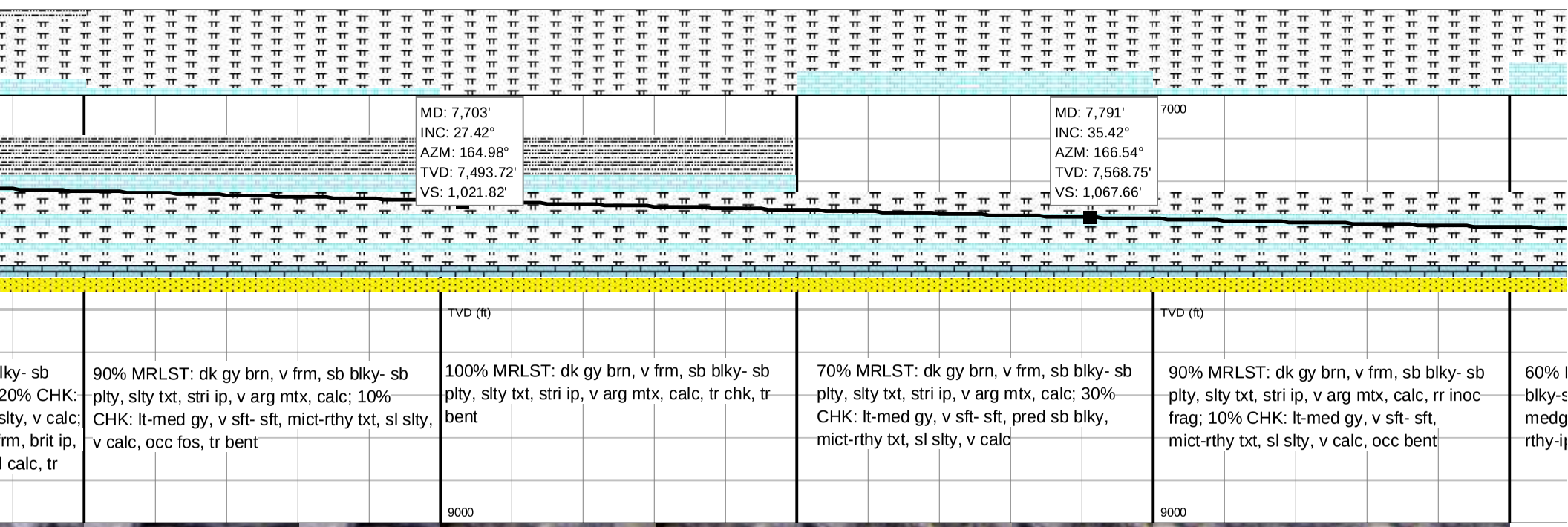
P POOR

W WELL

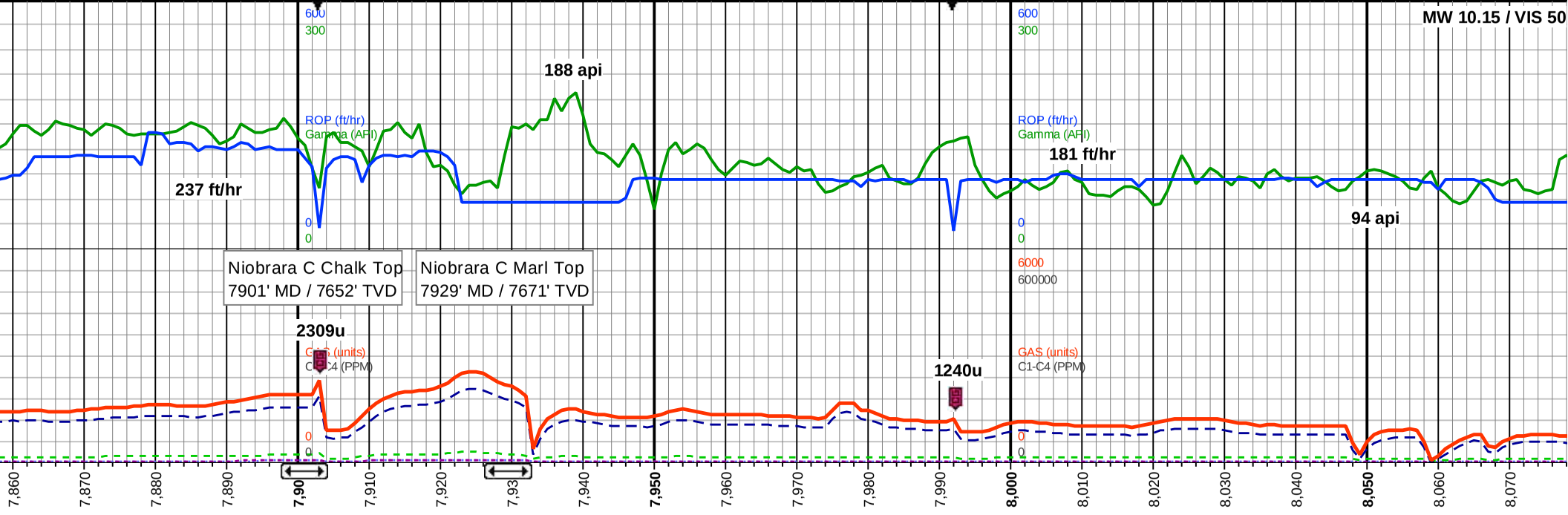
ConnectionGas(Vert)

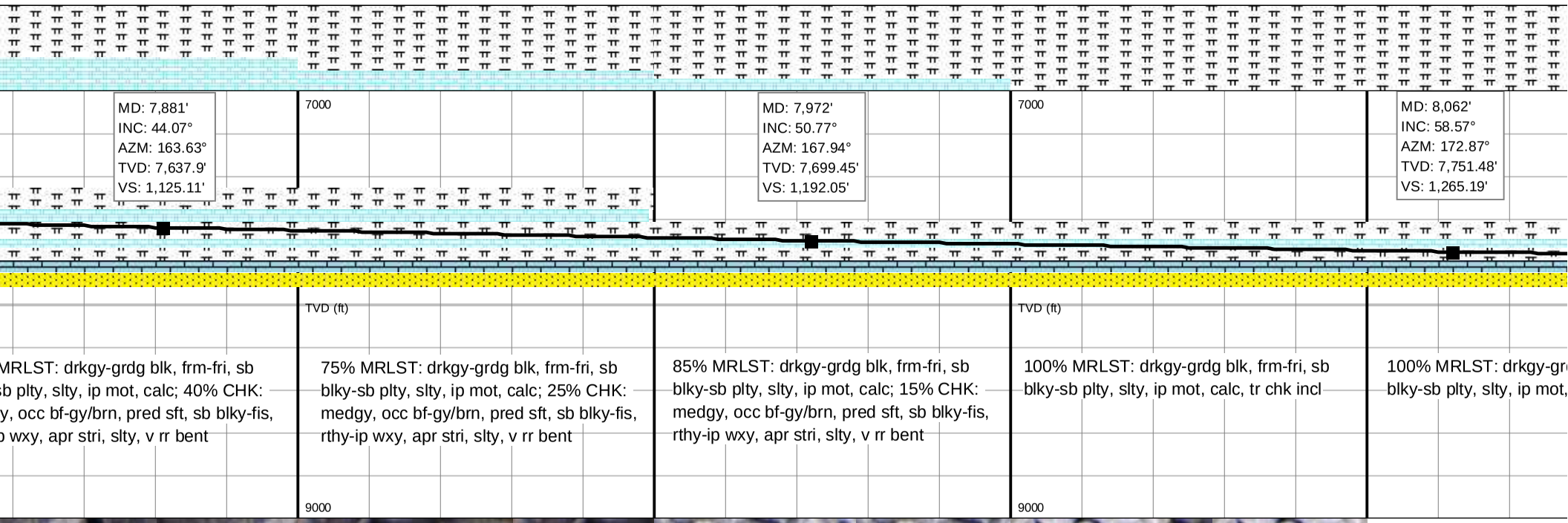

Curve/Survey Data
ROP
Gamma
ROP SCALE: 0-600 ft/hr
GAMMA SCALE 0-300 api
600
300
IN MW 10.0 / VIS 46
OUT MW 9.75 / VIS 42
249 api
241
ROP (ft/hr)
Gamma (API)
244 ft/hr
Gaps in Gamma Data due to Rapid Drilling Rate
0
0
Total Gas & Chromatograph
GAS
C1
C2
C3
C4
GAS SCALE: 0-6000 units
6000
600000
Sharon Springs Top
7558' MD / 7359' TVD
Niobrara Top
7569' MD / 7370' TVD
Niobrara A Chalk Top
7581' MD / 7381' TVD
Niobrara A Marl Top
7609' MD / 7408' TVD
KOP, 7517' MD, 23:44 MDT, 07/05/2017
2609
GAS (units)
C1-C4 (PPM)
1491u
Continued from Vertical Mudlog
Depth
7,460
7,470
7,480
7,490
7,500
7,510
7,520
7,530
7,540
7,550
7,560
7,570
7,580
7,590
7,600
7,610
7,620
7,630
% Lithology
TVD SCALE: 7000'-9000'
7000
MD: 7,525'
INC: 13.72°
AZM: 145.74°
TVD: 7,327.78'
VS: 959.96'
MD: 7,613'
INC: 21.17°
AZM: 153.17°
TVD: 7,411.68'
VS: 985.23'
Well Bore
TVD
TVD (ft)
9000
100% SLTY SH: pred drkgy, frm, brit ip, sb blky-sb plty, arg, gtty, sdy ip, v sl calc, scat bent
65% SLTY SH: pred drkgy, sl frm- frm, brit ip, sb blky-sb plty, arg, gtty, sdy ip, v sl calc, 25% MRLST: dk gy brn, v frm, sb blky- sb plty, slty txt, stri ip, v arg mtx, calc, 10% CHK: lt-med gy, v sft- sft, mict-rthy txt, sl slty, v calc, occ bent
70% MRLST: dk gy brn, v frm, sb b
plty, slty txt, stri ip, v arg mtx, calc;
lt-med gy, v sft- sft, mict-rthy txt, sl
10% SLTY SH: pred drkgy, sl frm- f
sb blky-sb plty, arg, gtty, sdy ip, v sl
bent
Images





lky- sb 20% CHK: slty, v calc; rm, brit ip, l calc, tr	90% MRLST: dk gy brn, v frm, sb blky- sb plty, slty txt, stri ip, v arg mtx, calc; 10% CHK: lt-med gy, v sft- sft, mict-rthy txt, sl slty, v calc, occ fos, tr bent	100% MRLST: dk gy brn, v frm, sb blky- sb plty, slty txt, stri ip, v arg mtx, calc, tr chk, tr bent	70% MRLST: dk gy brn, v frm, sb blky- sb plty, slty txt, stri ip, v arg mtx, calc; 30% CHK: lt-med gy, v sft- sft, pred sb blky, mict-rthy txt, sl slty, v calc	90% MRLST: dk gy brn, v frm, sb blky- sb plty, slty txt, stri ip, v arg mtx, calc, rr inoc frag; 10% CHK: lt-med gy, v sft- sft, mict-rthy txt, sl slty, v calc, occ bent	60% blky-s medg rthy-i





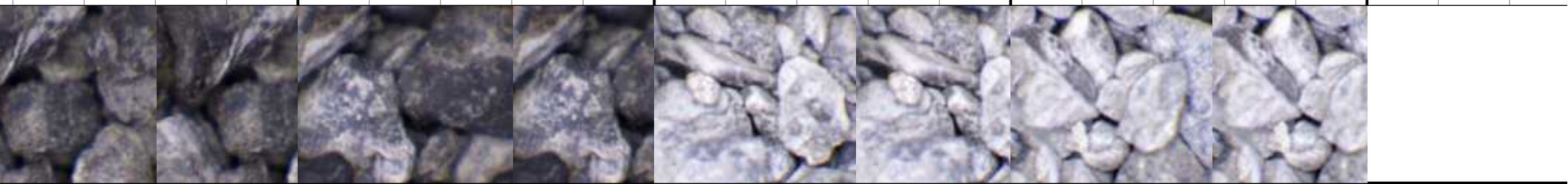
MRLST: drkgy-grdg blk, frm-fri, sb
sb plty, slty, ip mot, calc; 40% CHK:
y, occ bf-gy/brn, pred sft, sb blky-fis,
p wxy, apr stri, slty, v rr bent

75% MRLST: drkgy-grdg blk, frm-fri, sb blky-sb plty, slty, ip mot, calc; 25% CHK: medgy, occ bf-gy/brn, pred sft, sb blky-fis, rthy-ip wxy, apr stri, slty, v rr bent

85% MRLST: drkgy-grdg blk, frm-fri, sb blky-sb plty, slty, ip mot, calc; 15% CHK: medgy, occ bf-gy/brn, pred sft, sb blky-fis, rthy-ip wxy, apr stri, slty, v rr bent

100% MRLST: drkgy-grdg blk, frm-fri, sb blky-sb plty, slty, ip mot, calc, tr chk incl

100% MRLST: drkgy-gr
blky-sb plty, slty, ip mot,



WOB: 26.3 Klbs
ROP: 153 ft/hr
RPM: 99
SPP: 3,785 psi
Diff Press: 558 psi
SPM#1: 84
SPM#2: 84

IN MW 10 / VIS 45
OUT MW 10 / VIS 49

IN MW 10.2 / VIS 44
OUT MW 10 / VIS 4

600
300
ROP (ft/hr)
Gamma (API)
0
0

140 ft/hr

22 api

256 ft/hr

6000
600000
GAS (units)
C1-C4 (PPM)

Fort Hayes Top
8152' MD / 7792' TVD

Codell Top
8234' MD / 7816' TVD

Gas Scale Change
0-7500 units

1212u

2272u

1987u

8,080 8,090 8,100 8,110 8,120 8,130 8,140 8,150 8,160 8,170 8,180 8,190 8,200 8,210 8,220 8,230 8,240 8,250 8,260 8,270 8,280 8,290

7000

MD: 8,151'
INC: 68.23°
AZM: 175.17°
TVD: 7,791.28'
VS: 1,343.96'

MD: 8,240'
INC: 77.62°
AZM: 177.32°
TVD: 7,817.39'
VS: 1,427.68'

TVD (ft)

Interpreted Lithology Exagerated

dg blk, frm-fri, sb calc, tr chk incl

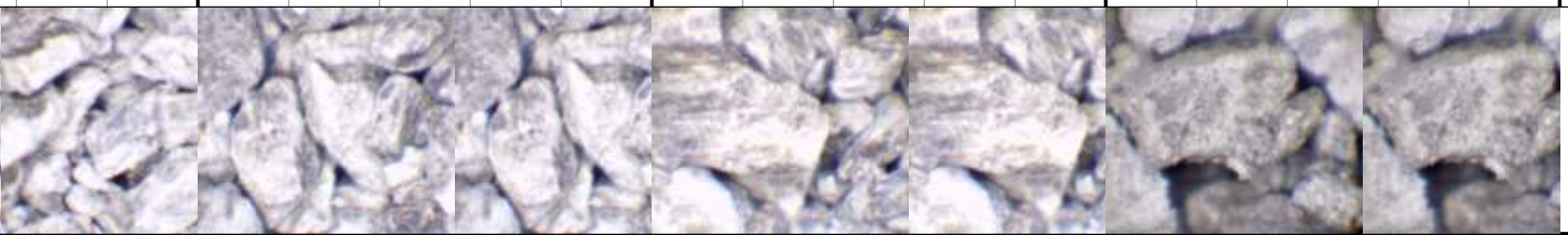
85% LS: gy/brn, bf wh-crm, frm-brit, sb plty-sb blky, micxln-xl tex, occ sl slty, v calc; 15% MRLST: drkgy-grdg blk, frm-fri, sb blky-sb plty, slty, ip mot, calc

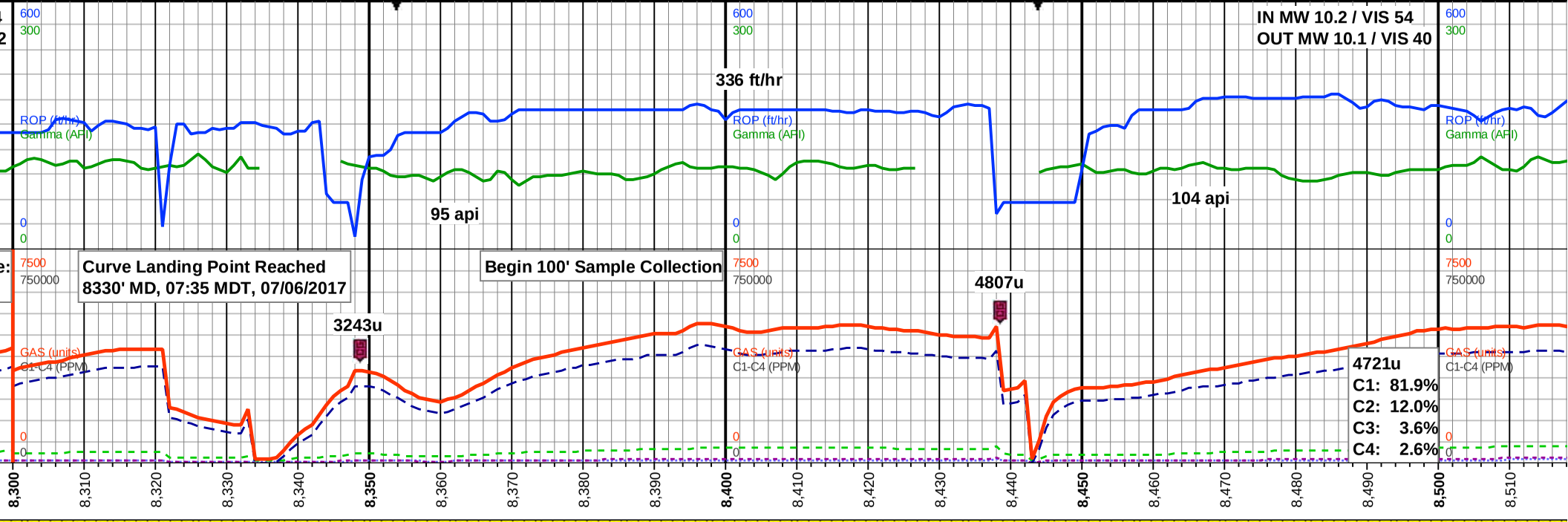
100% LS: gy/brn, bf wh-crm, frm-brit, sb plty-sb blky, micxln-xl tex, sl slty, v calc

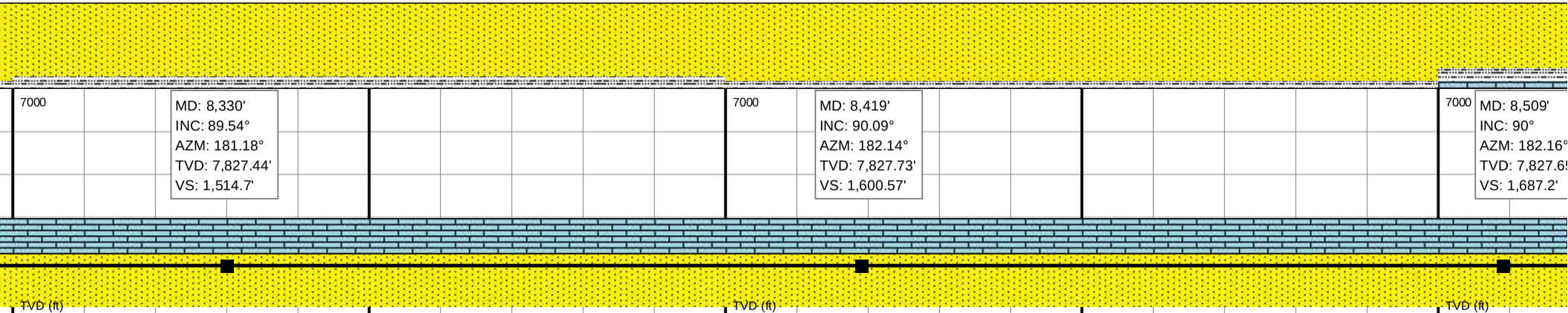
100% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc

90% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc; 10% SLTY SH: drkgy, sb blky-sb plty, mod frm-frm, tr fis, rthy, slt, mod calc

9000







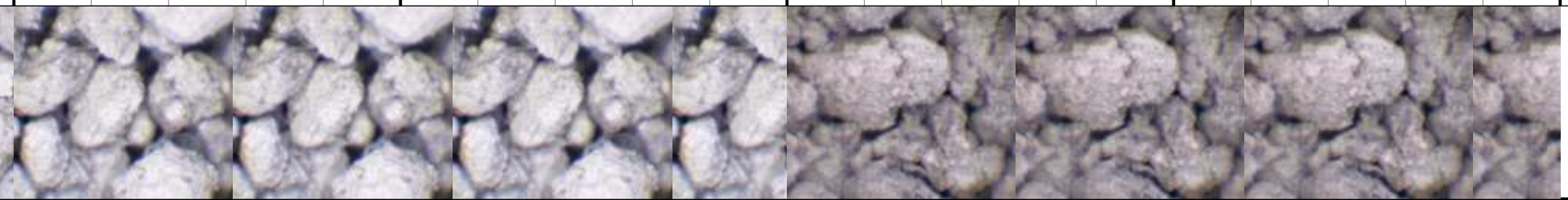
85% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc; 15% SLTY SH: drkgy, sb blky-sb plty, mod frm-frm, tr fis, rthy, slt, mod calc

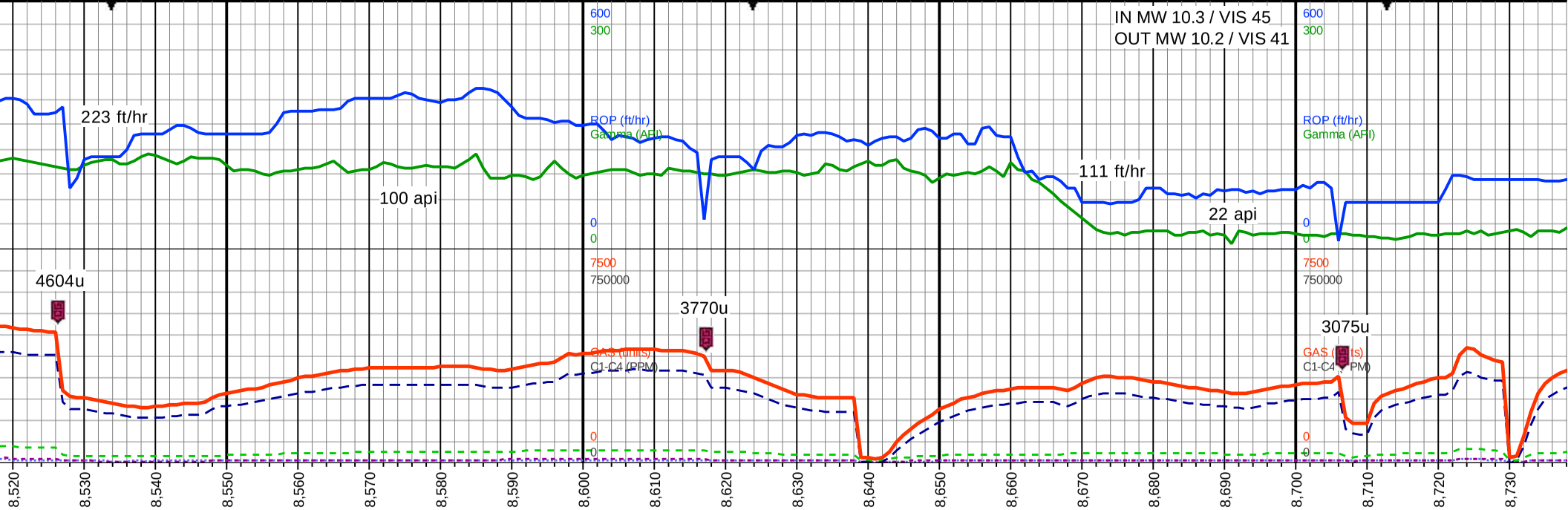
85% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc; 15% SLTY SH: drkgy, sb blky-sb plty, mod frm-frm, tr fis, rthy, slt, mod calc

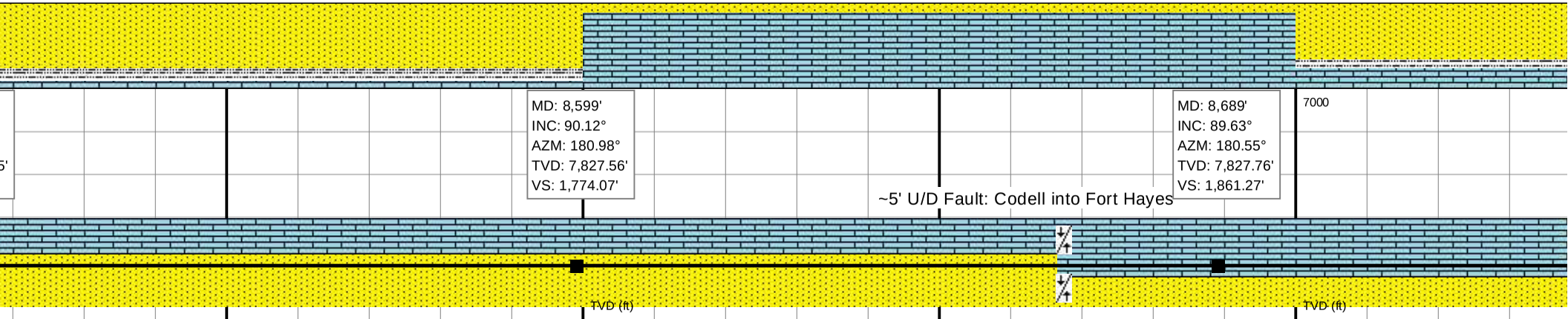
90% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc, ip grdg slty ss; 10% SLTY SH: drkgy, sb blky-sb plty, mod frm-frm, tr fis, rthy, slt, mod calc, sme intbd wi sd

75% SS: m
srt, arg-slty
frm-frm, tr f
frm-brit, sb

9000







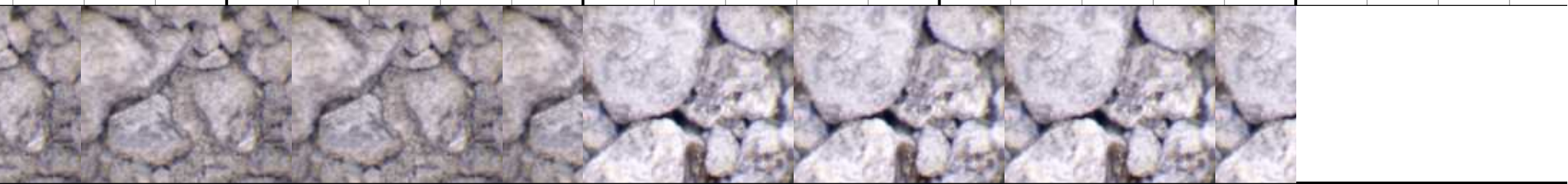
ed-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod mtx, calc, ip grdg slty ss; 15% SLTY SH: drkgy, sb blky-sb plty, mod is, rthy, slt, mod calc, sme intbd wi sd; 10% LS: gy/brn, bf wh-crm, plty-sb blky, micxln-xl tex, sl slty, v calc

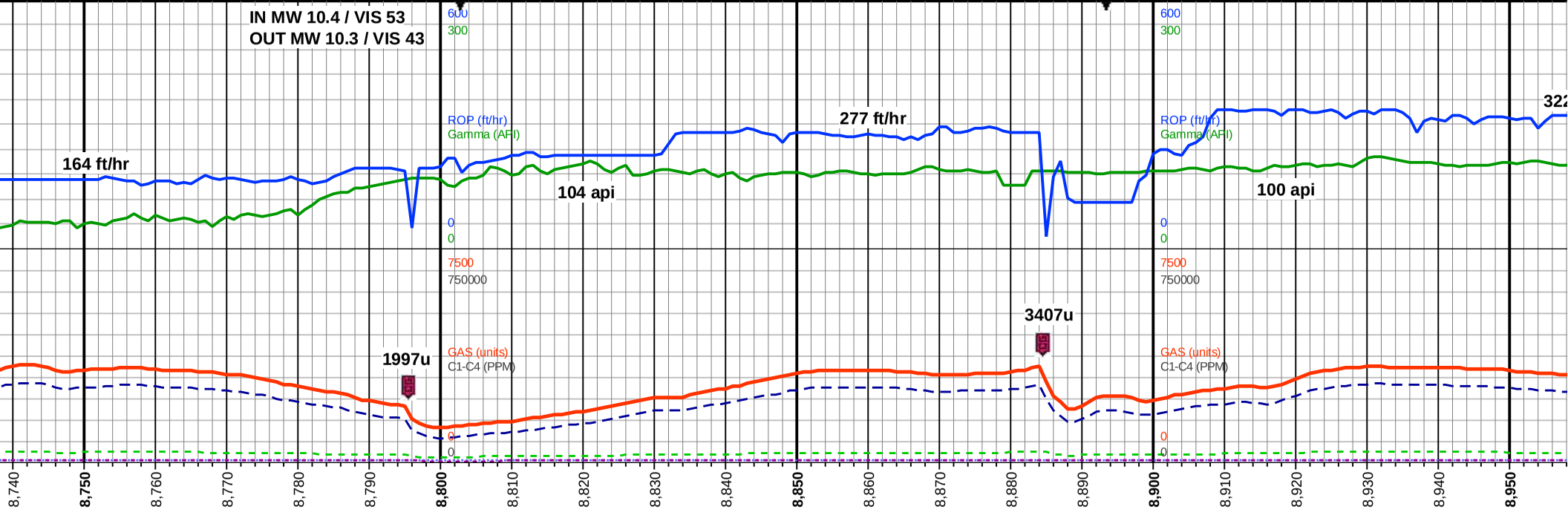
90% LS: gy/brn, bf wh-crm, frm-brit, sb plty-sb blky, micxln-xl tex, sl slty, v calc, tr cal/fos frags; 10% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc, ip grdg slty ss

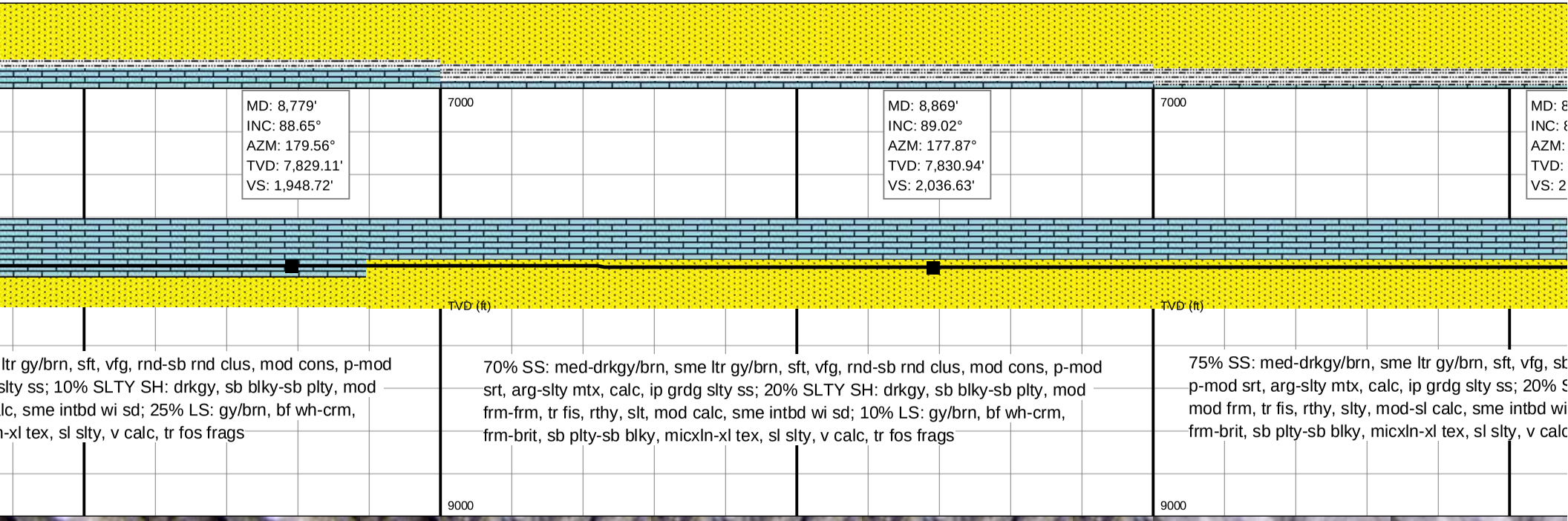
65% SS: med-drkgy/brn, sme srt, arg-slty mtx, calc, ip grdg frm-frm, tr fis, rthy, slt, mod ca frm-brit, sb plty-sb blky, micxln

9000

9000



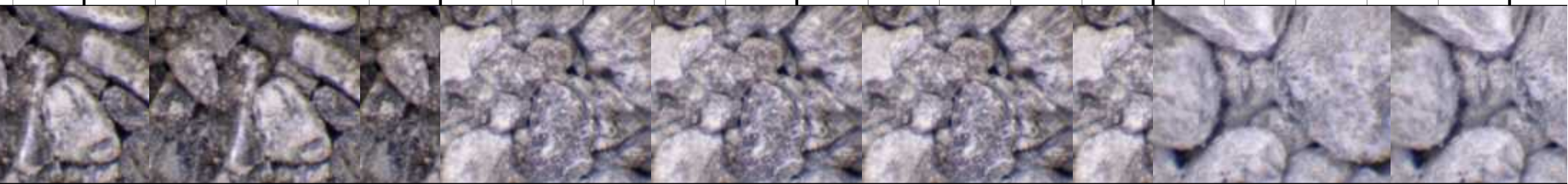


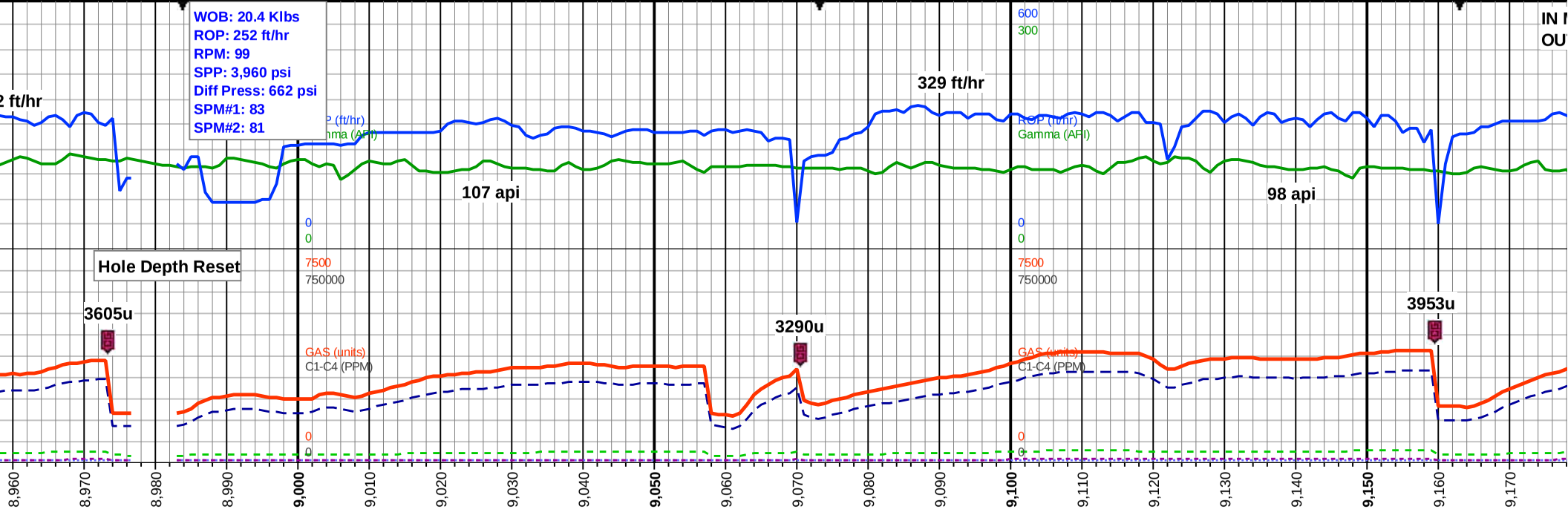


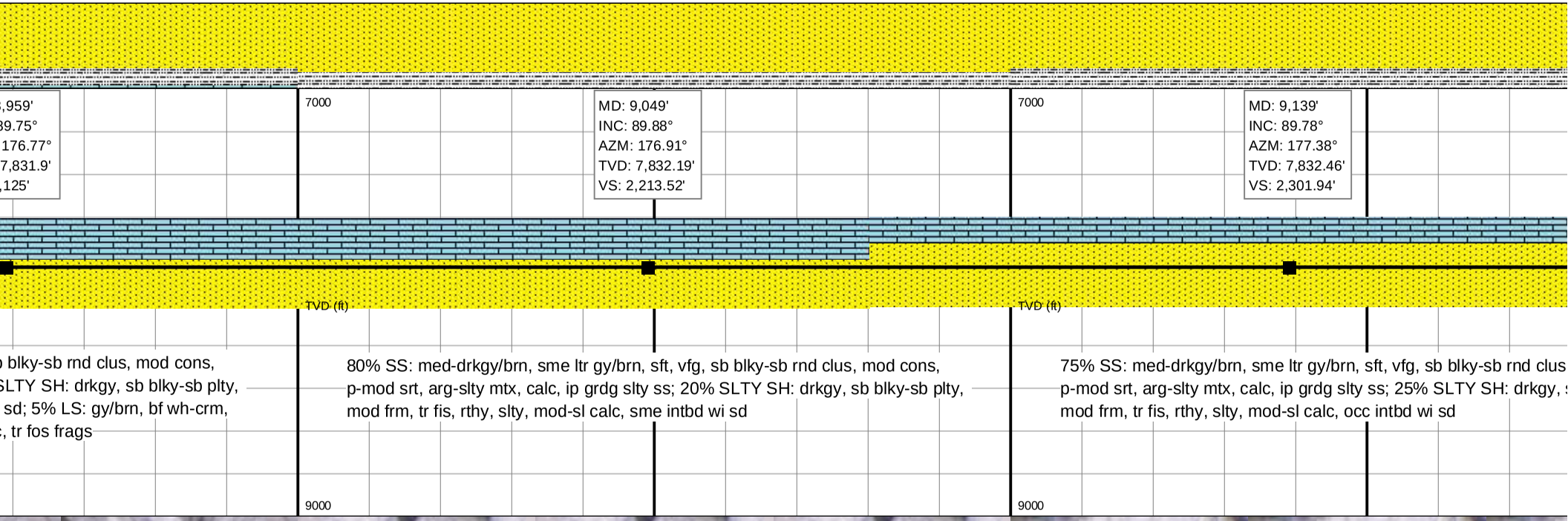
ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod slty ss; 10% SLTY SH: drkgy, sb blky-sb plty, mod lc, sme intbd wi sd; 25% LS: gy/brn, bf wh-crm, n-xl tex, sl slty, v calc, tr fos frags

70% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc, ip grdg slty ss; 20% SLTY SH: drkgy, sb blky-sb plty, mod frm-frm, tr fis, rthy, slt, mod calc, sme intbd wi sd; 10% LS: gy/brn, bf wh-crm, frm-brit, sb plty-sb blky, micxln-xl tex, sl slty, v calc, tr fos frags

75% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, sb p-mod srt, arg-slty mtx, calc, ip grdg slty ss; 20% S mod frm, tr fis, rthy, slty, mod-sl calc, sme intbd wi frm-brit, sb plty-sb blky, micxln-xl tex, sl slty, v calc



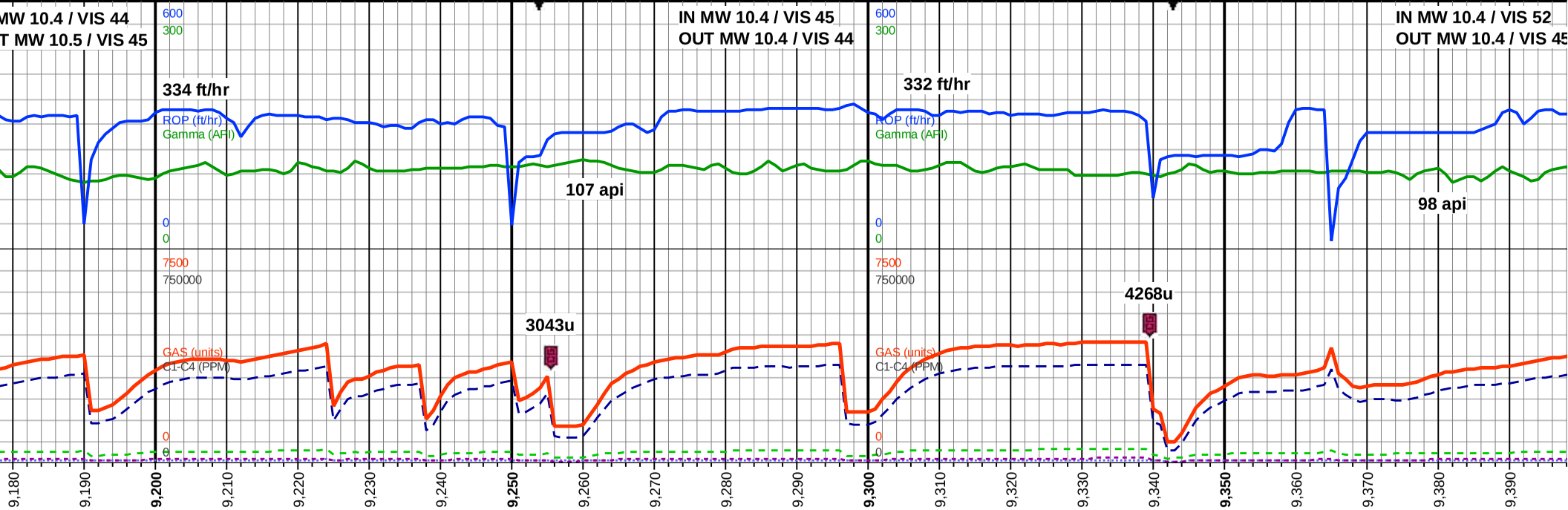


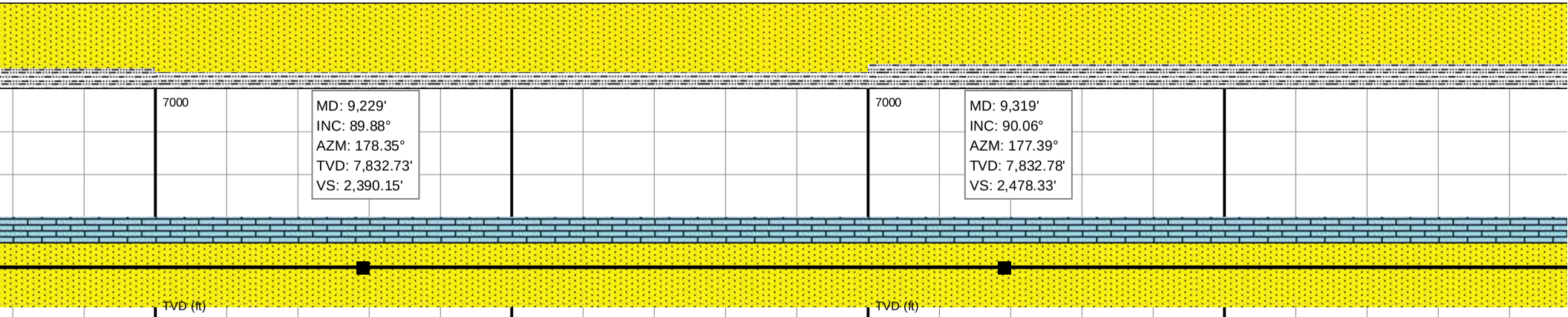


b blky-sb rnd clus, mod cons,
SLTY SH: drkgy, sb blky-sb plty,
sd; 5% LS: gy/brn, bf wh-crm,
, tr fos frags

80% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, sb blky-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, calc, ip grdg slty ss; 20% SLTY SH: drkgy, sb blky-sb plty, mod frm, tr fis, rthy, slty, mod-sl calc, sme intbd wi sd

75% SS: med-drkgy/brn, sme ltr gy/brn, sft, vfg, sb blky-sb rnd clus p-mod srt, arg-slty mtx, calc, ip grdg slty ss; 25% SLTY SH: drkgy, mod frm, tr fis, rthy, slty, mod-sl calc, occ intbd wi sd





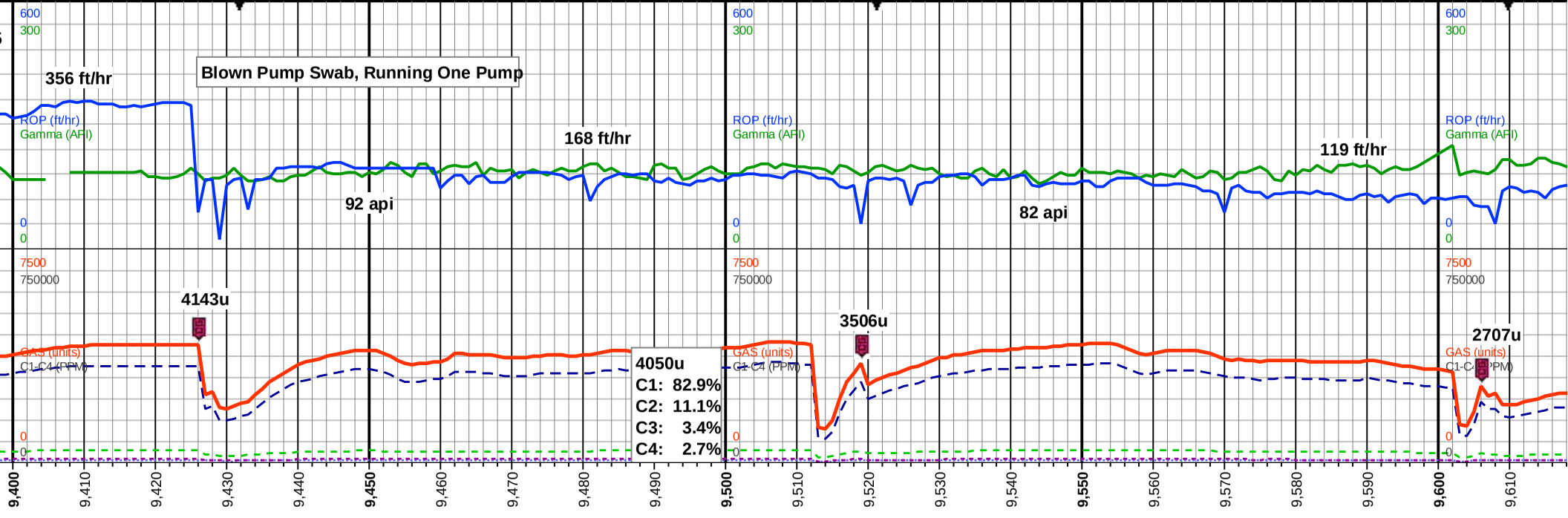
, mod cons,
sb blky-sb plty,

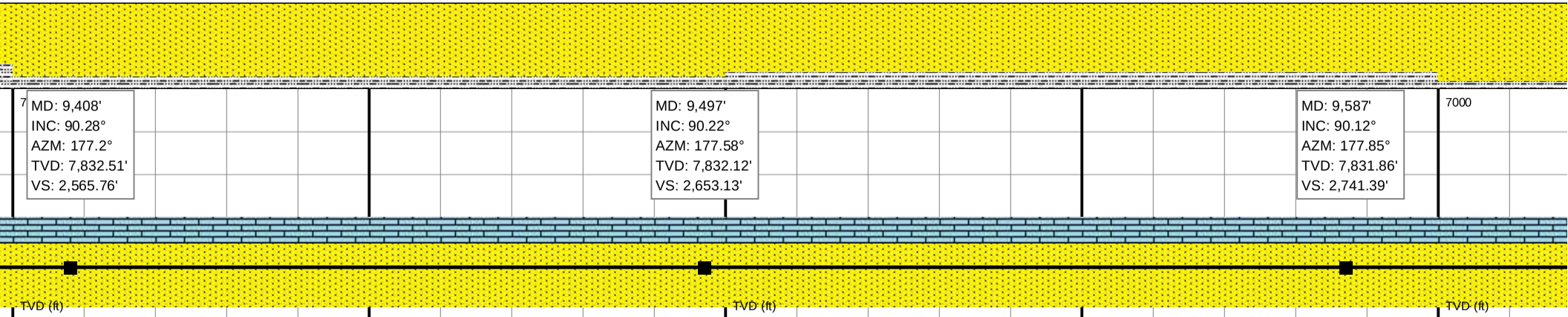
80% SS: drkgy/brn, med-sme ltgy/brn, sft-fri, vfg, sb blky-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, mod calc, grdg slty ss; 20% SLTY SH: drkgy, sb blky-sb fis, mod frm, rthy, slty, sl calc, occ intbd wi sd

70% SS: drkgy/brn, med-sme ltgy/brn, sft-fri, vfg, sb blky-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, mod calc, grdg slty ss; 30% SLTY SH: drkgy, sb blky-sb fis, mod frm, rthy, slty, sl calc, occ intbd wi sd

9000

9000



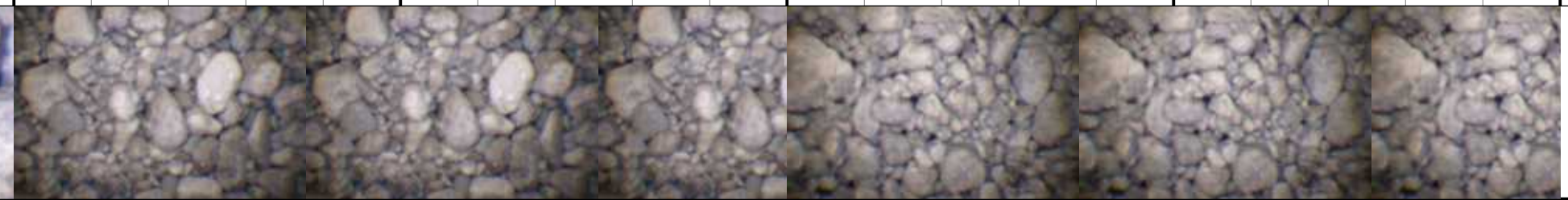


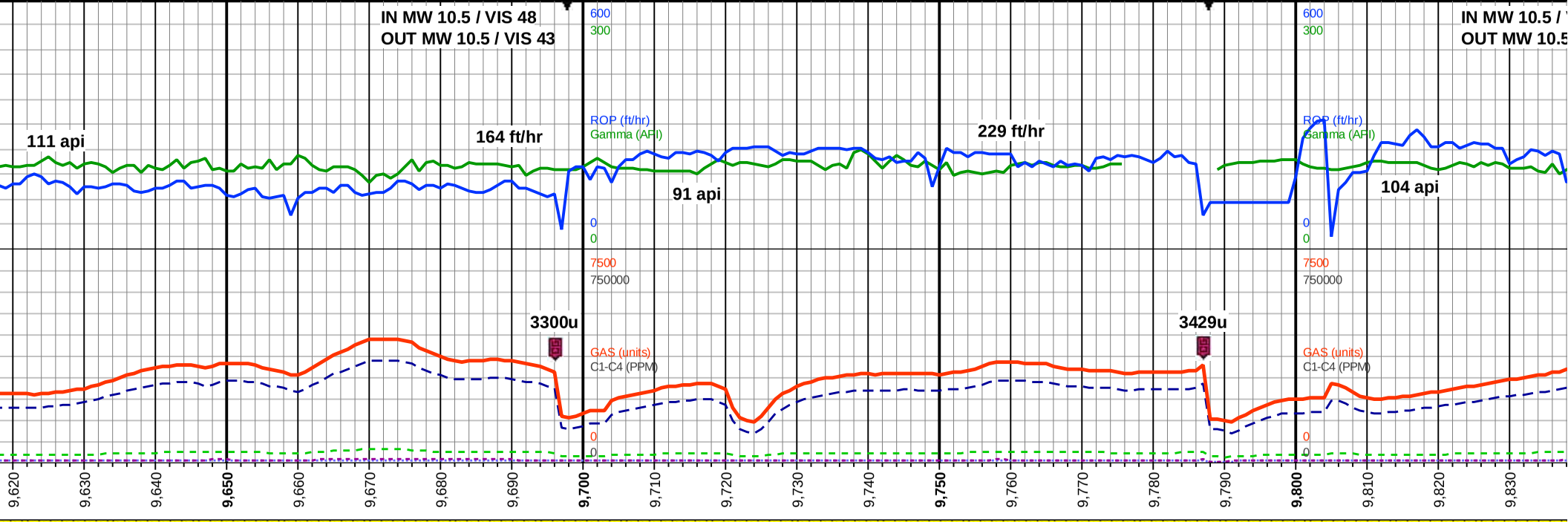
85% SS: drkgy-drkgy/brn, occ ltr gy/brn, sft-fri, vfg, sb blky-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, mod calc, grdg slty ss; 15% SLTY SH: drkgy, sb blky-sb fis, mod frm, rthy, slty, sl calc, occ intbd wi sd

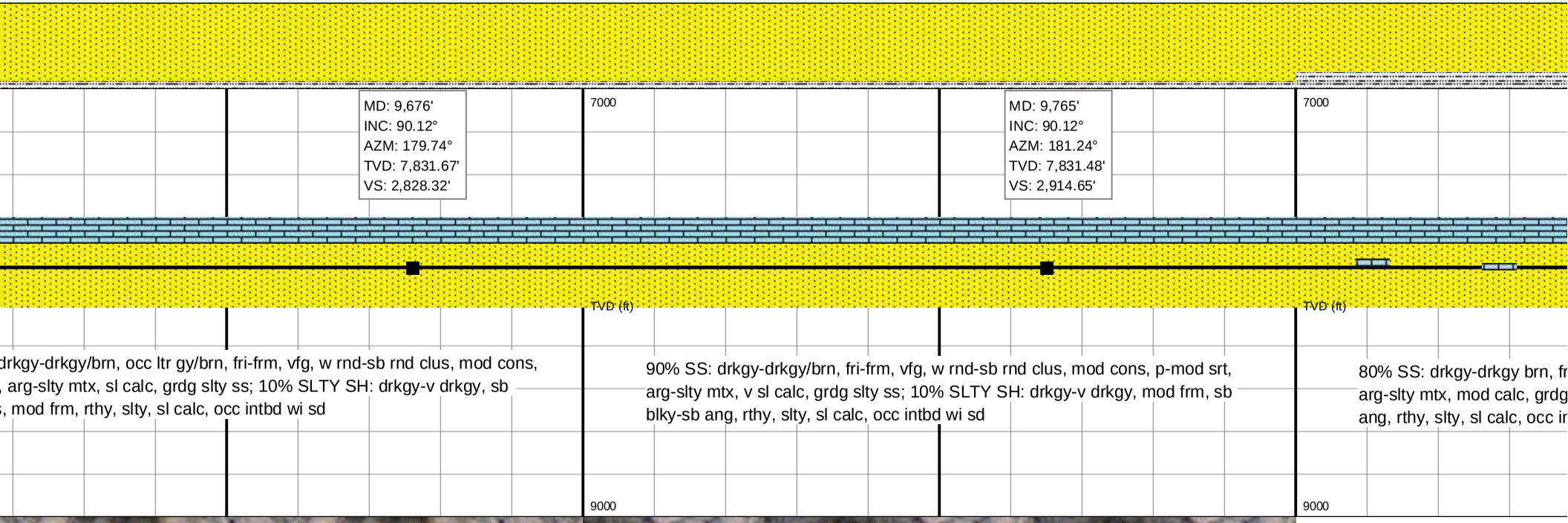
80% SS: drkgy-drkgy/brn, occ ltr gy/brn, sft-fri, vfg, sb blky-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, mod calc, grdg slty ss; 20% SLTY SH: drkgy, sb blky-sb fis, mod frm, rthy, slty, sl calc, occ intbd wi sd

90% SS: d
p-mod srt
blky-sb fis

9000



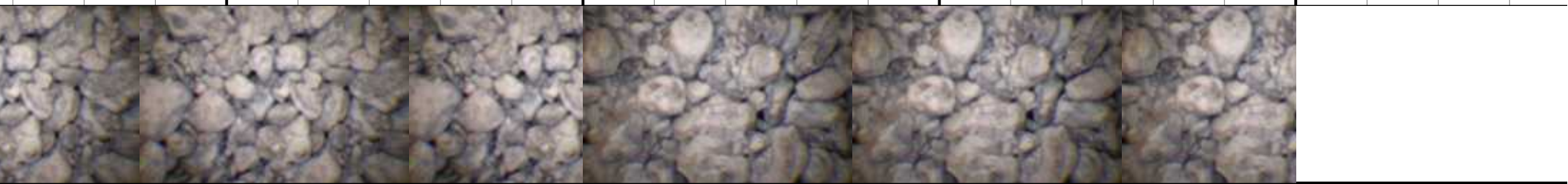


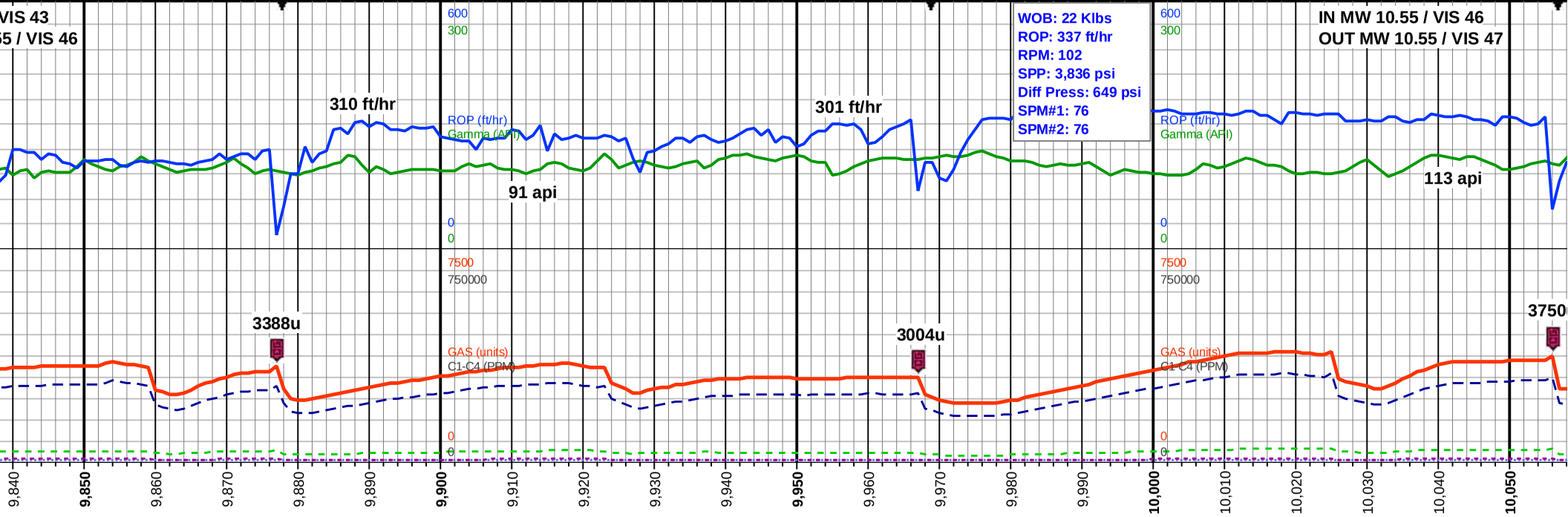


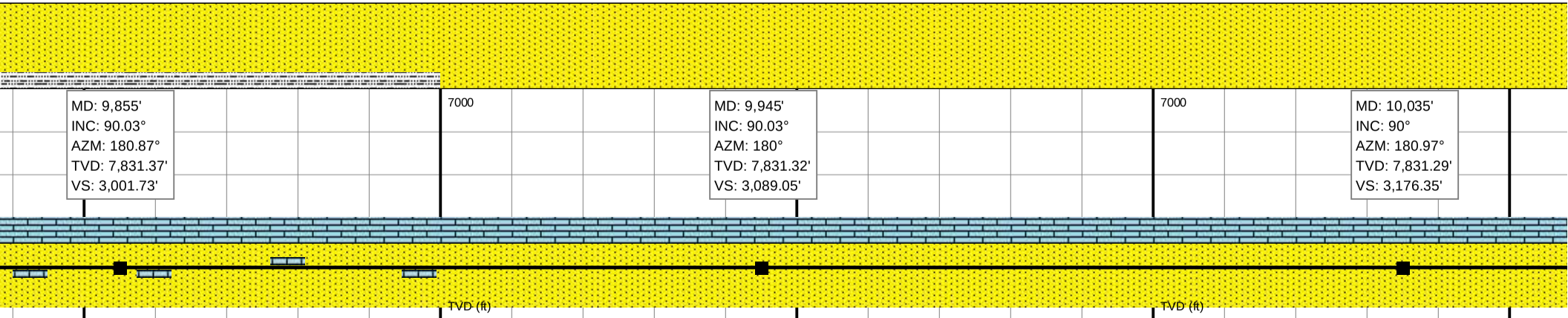
drkgy-drkgy/brn, occ ltr gy/brn, fri-frm, vfg, w rnd-sb rnd clus, mod cons,
, arg-slty mtx, sl calc, grdg slty ss; 10% SLTY SH: drkgy-v drkgy, sb
s, mod frm, rthy, slty, sl calc, occ intbd wi sd

90% SS: drkgy-drkgy/brn, fri-frm, vfg, w rnd-sb rnd clus, mod cons, p-mod srt, arg-slty mtx, v sl calc, grdg slty ss; 10% SLTY SH: drkgy-v drkgy, mod frm, sb blky-sb ang, rthy, slty, sl calc, occ intbd wi sd

80% SS: drkgy-drkgy brn, fr
arg-slty mtx, mod calc, grdg
ang, rthy, slty, sl calc, occ ir







i-frm, vfg, w rnd-sb rnd clus, mod cons, mod srt,
slty ss; 20% SLTY SH: drkgy-v drkgy, frm, sb blky-sb
ntbd wi sd; mnr LS strg or pos con

100% SS: drkgy-drkgy brn, fri-frm, vfg, w rnd-sb rnd clus, mod cons, mod srt, v
arg-slty mtx, v sl calc, grdg slty ss, mnr slty sh frags

100% SS: drkgy brn-v drkgy, fri-frm, vfg, w rnd-
arg-slty mtx, v sl calc, grdg slty ss, mnr slty sh f

9000

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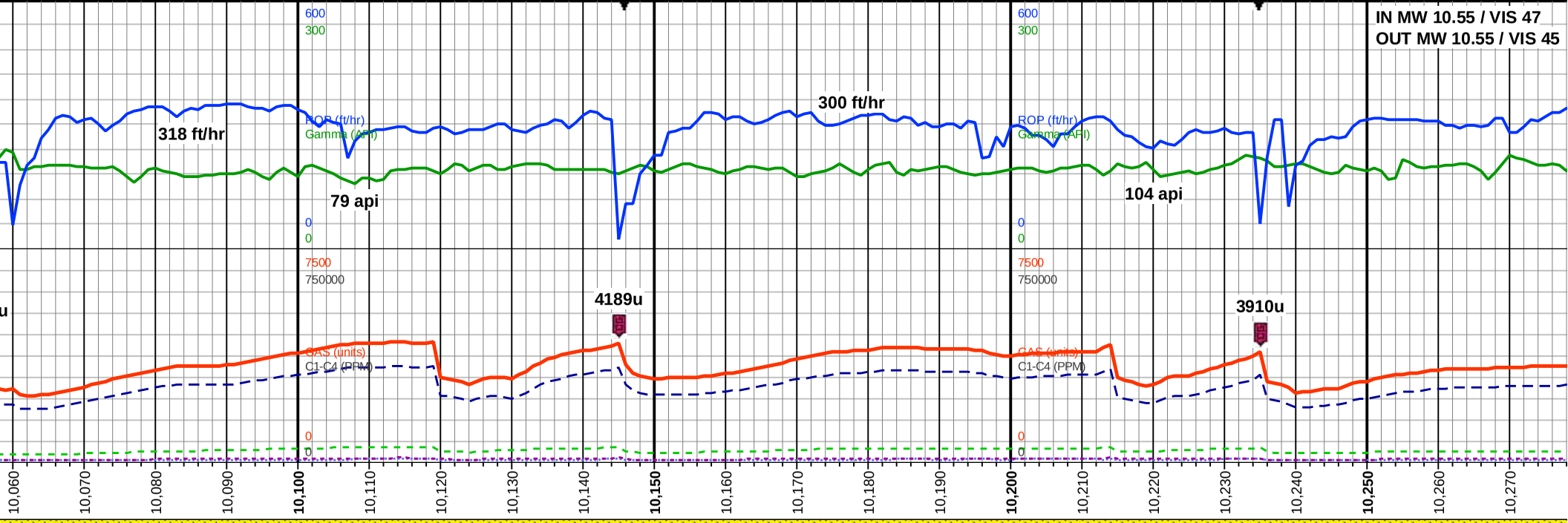
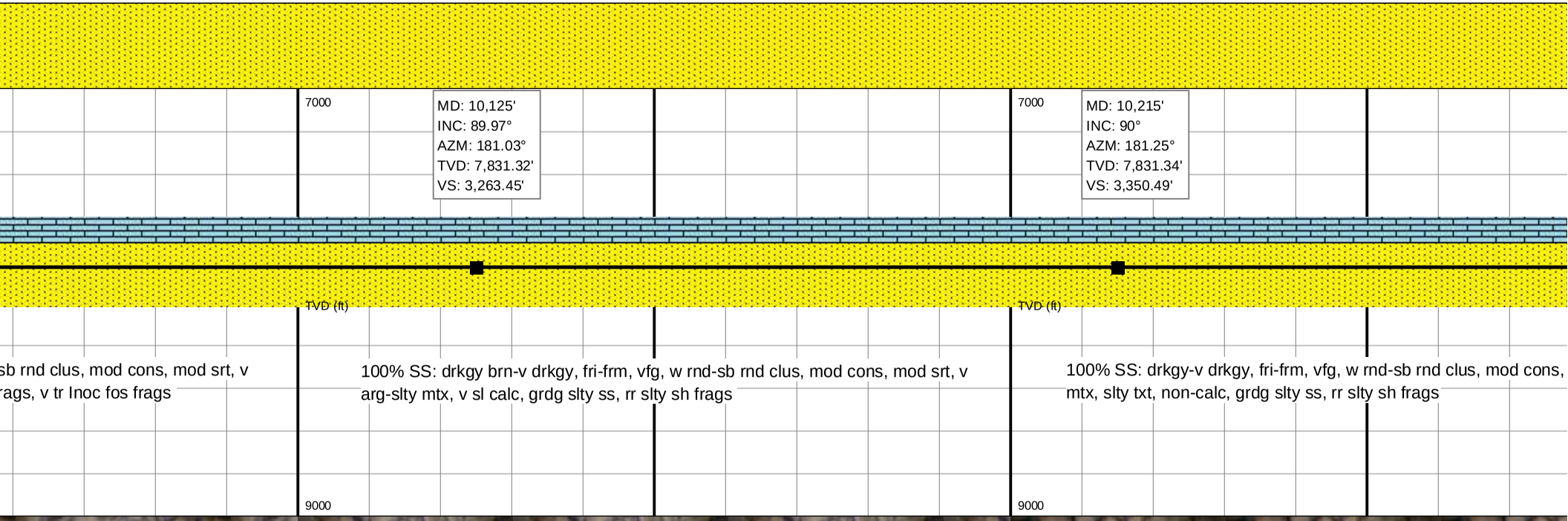
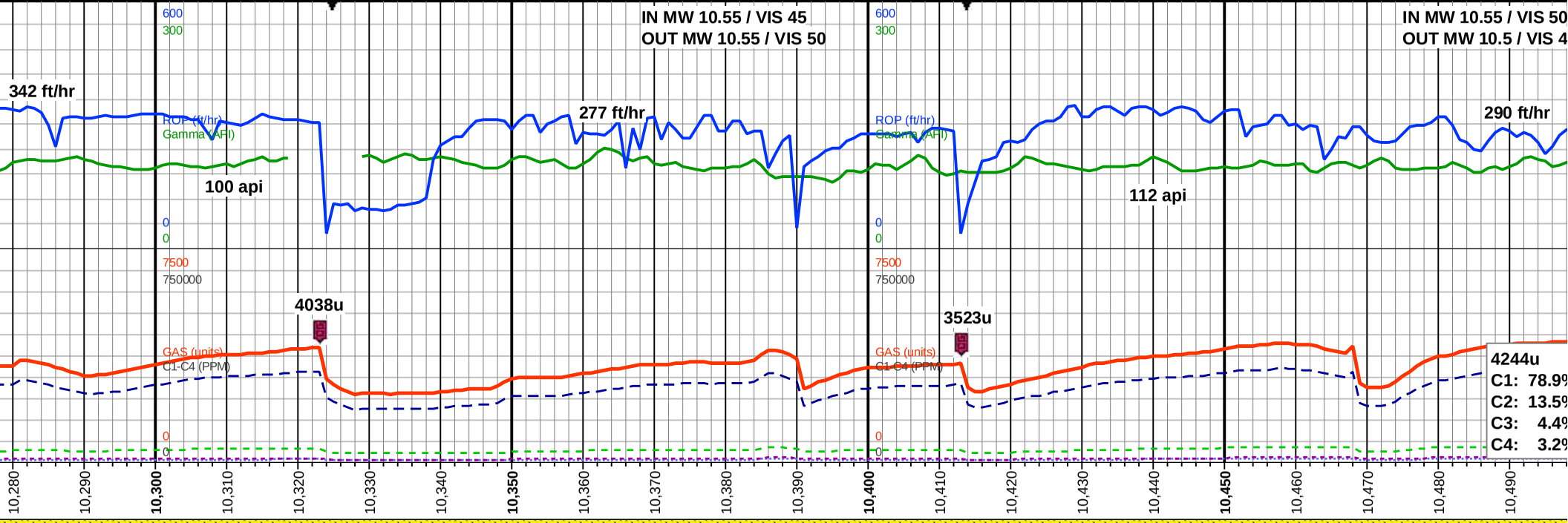




sb rnd clus, mod cons, mod srt, v
rags, v tr Inoc fos frags

100% SS: drkgy brn-v drkgy, fri-frm, vfg, w rnd-sb rnd clus, mod cons, mod srt, v
arg-slty mtx, v sl calc, grdg slty ss, rr slty sh frags

100% SS: drkgy-v drkgy, fri-frm, vfg, w rnd-sb rnd clus, mod cons,
mtx, slty txt, non-calc, grdg slty ss, rr slty sh frags



MD: 10,305'
INC: 89.88°
AZM: 181.4°
TVD: 7,831.44'
VS: 3,437.47'

MD: 10,395'
INC: 90.15°
AZM: 180.98°
TVD: 7,831.41'
VS: 3,524.49'

MD: 10,485'
INC: 90.18°
AZM: 180.45°
TVD: 7,831.15'
VS: 3,611.7'

TVD (ft)

mod srt, v arg

100% SS: drkgy brn-v drkgy, fri-frm, vfg, w rnd-sb rnd clus, mod cons-cons, mod srt, v arg mtx, slty txt, non-calc, grdg slty ss, rr slty sh frags

100% SS: drkgy brn-v drkgy, frm-sl hrd, vfg, w rnd-sb rnd clus, cons, mod srt, v arg mtx, slty txt, non-calc, grdg slty ss

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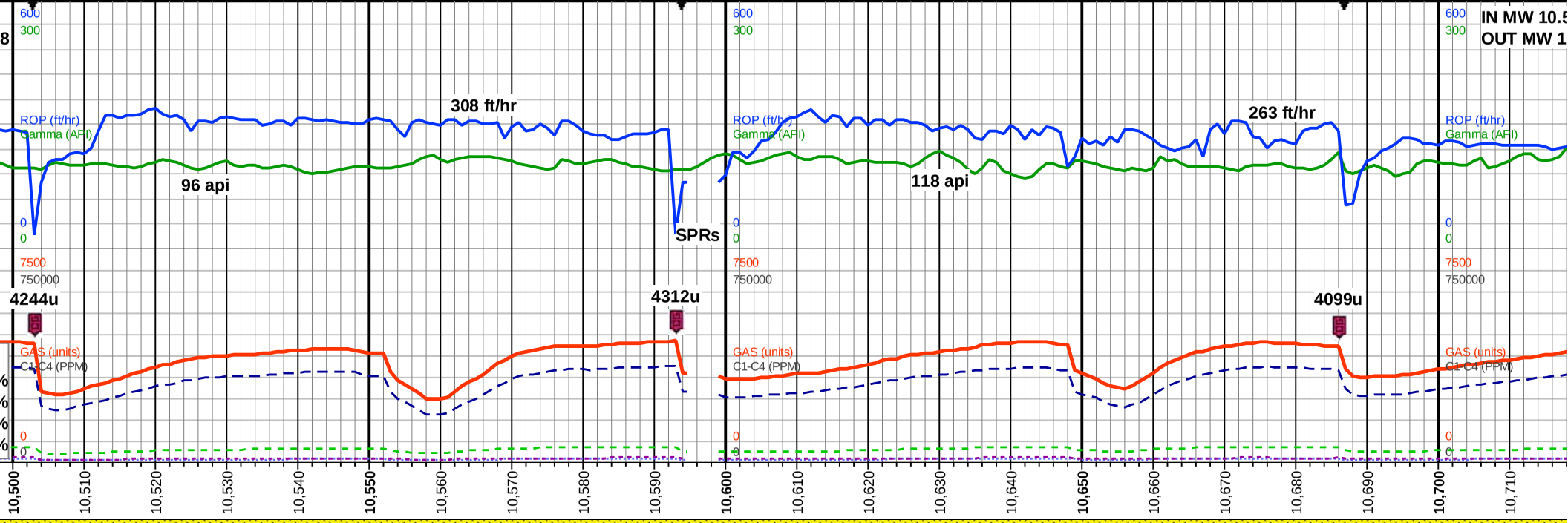
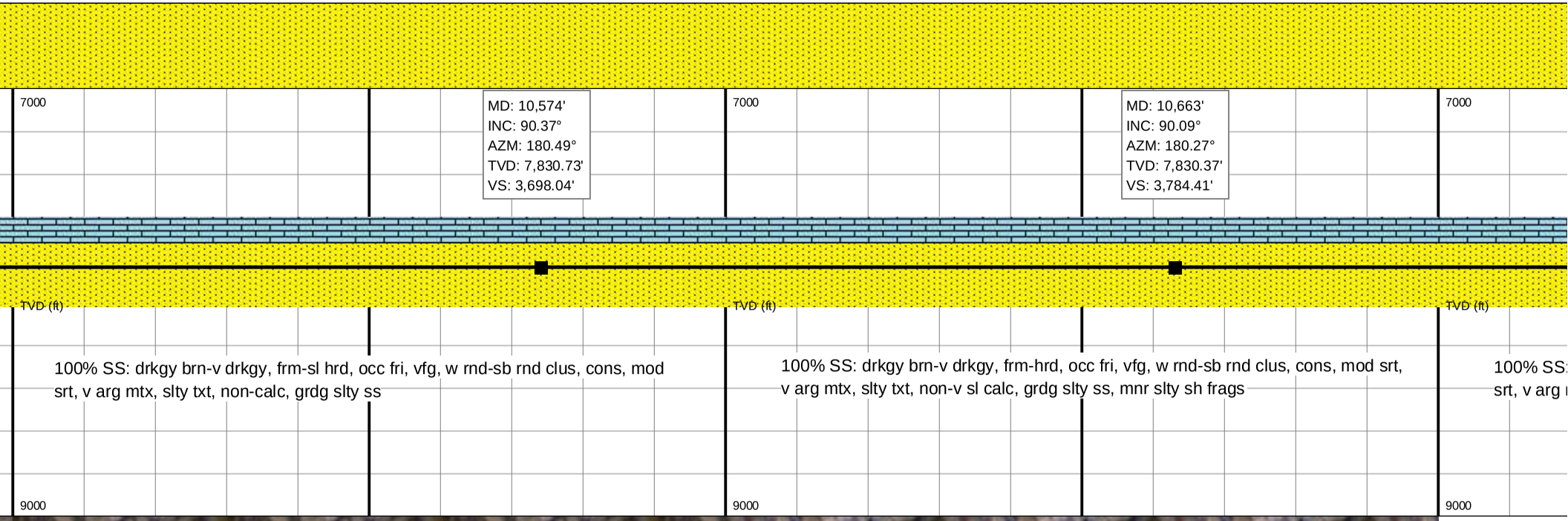
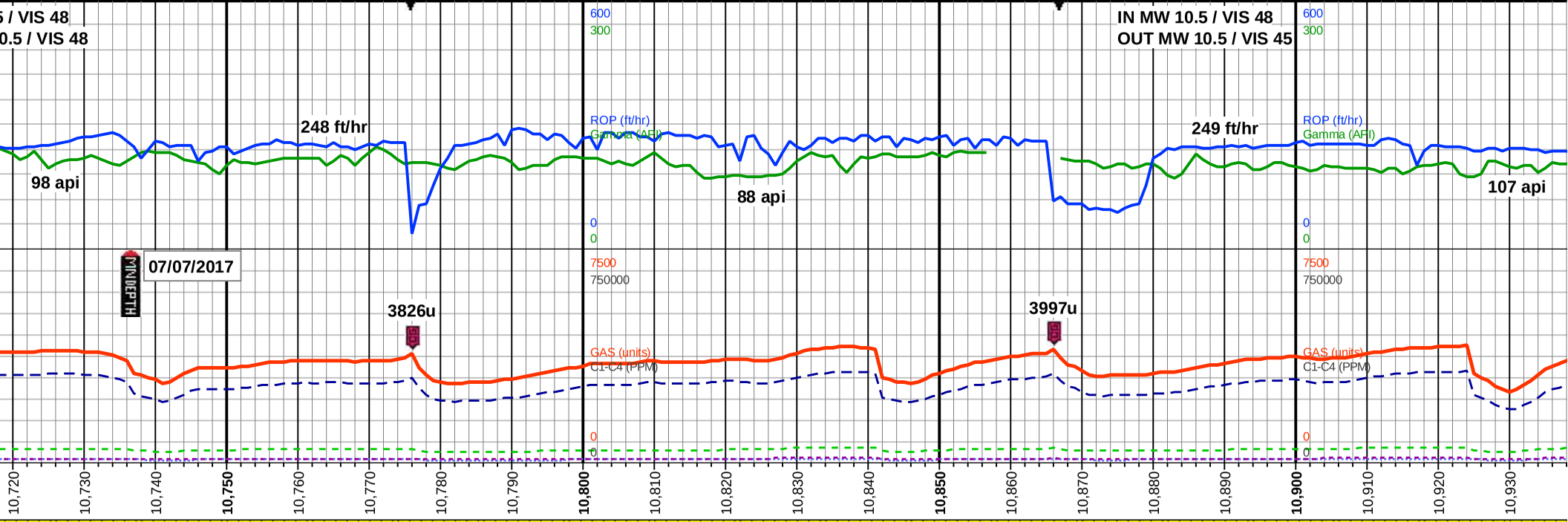


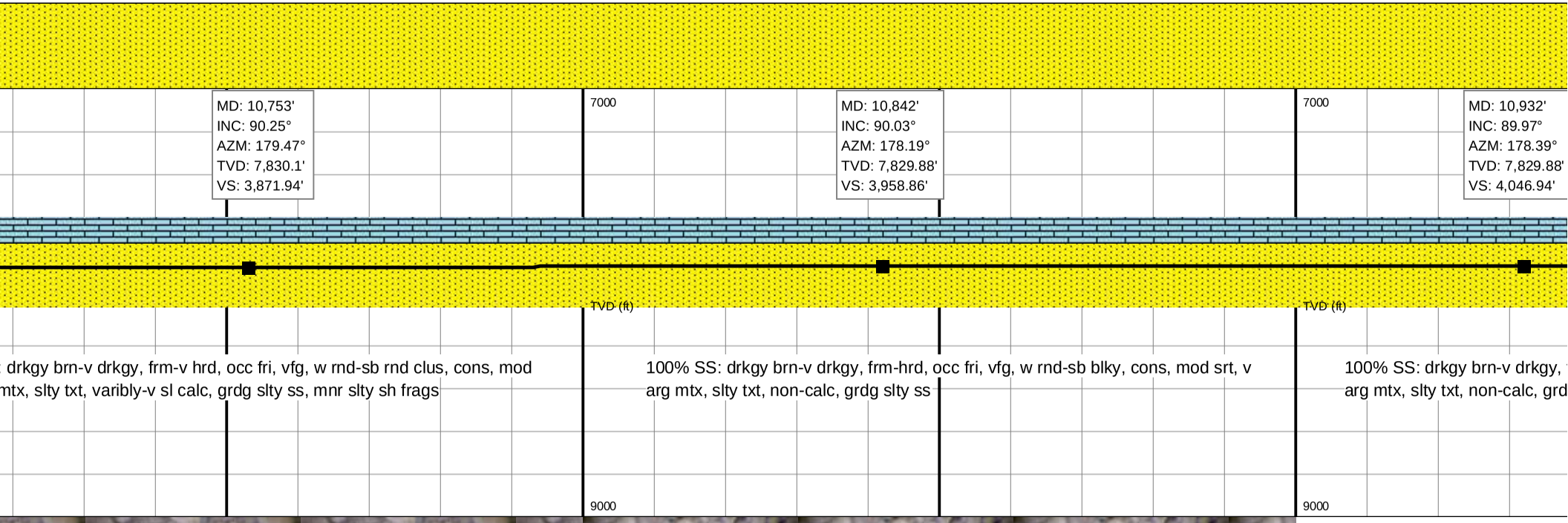


100% SS: drkgy brn-v drkgy, frm-sl hrd, occ fri, vfg, w rnd-sb rnd clus, cons, mod srt, v arg mtx, slty txt, non-calc, grdg slty ss

100% SS: drkgy brn-v drkgy, frm-hrd, occ fri, vfg, w rnd-sb rnd clus, cons, mod srt, v arg mtx, slty txt, non-v sl calc, grdg slty ss, mnr slty sh frags

100% SS
srt, v arg





drkgy brn-v drkgy, frm-v hrd, occ fri, vfg, w rnd-sb rnd clus, cons, mod
mtx, slty txt, varibly-v sl calc, grdg slty ss, mnr slty sh frags

100% SS: drkgy brn-v drkgy, frm-hrd, occ fri, vfg, w rnd-sb blky, cons, mod srt, v
arg mtx, slty txt, non-calc, grdg slty ss

100% SS: drkgy brn-v drkgy,
arg mtx, slty txt, non-calc, grd

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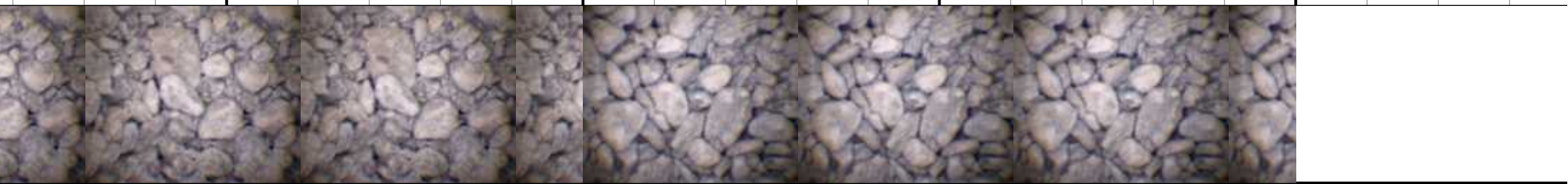
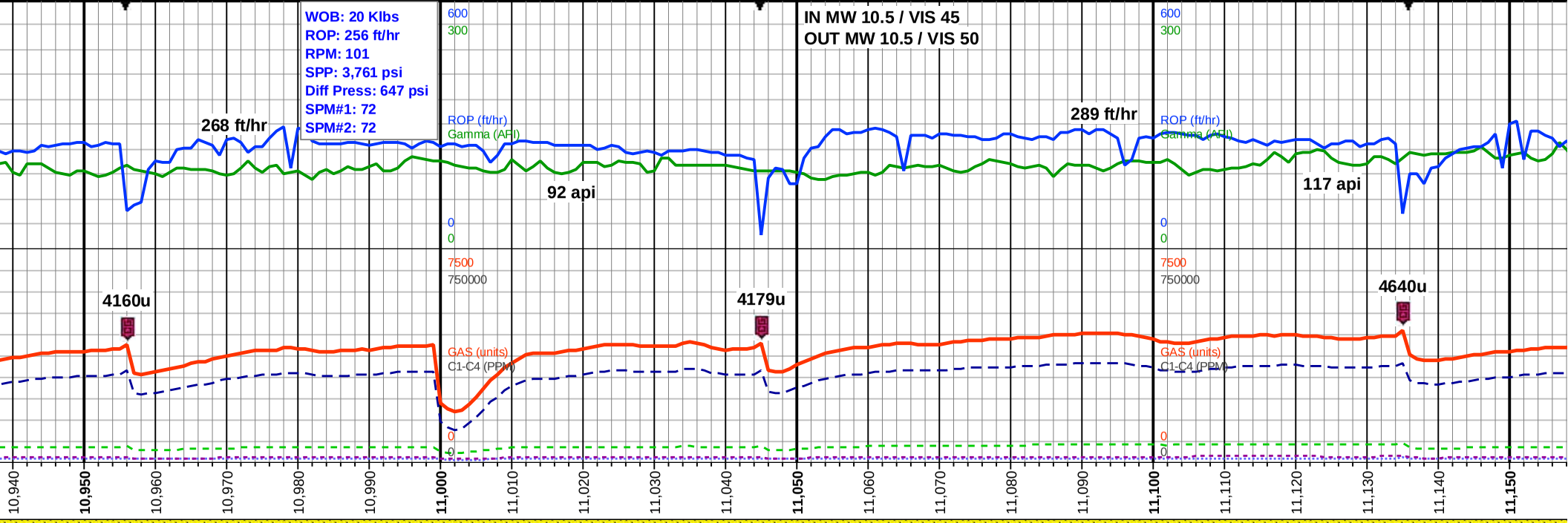
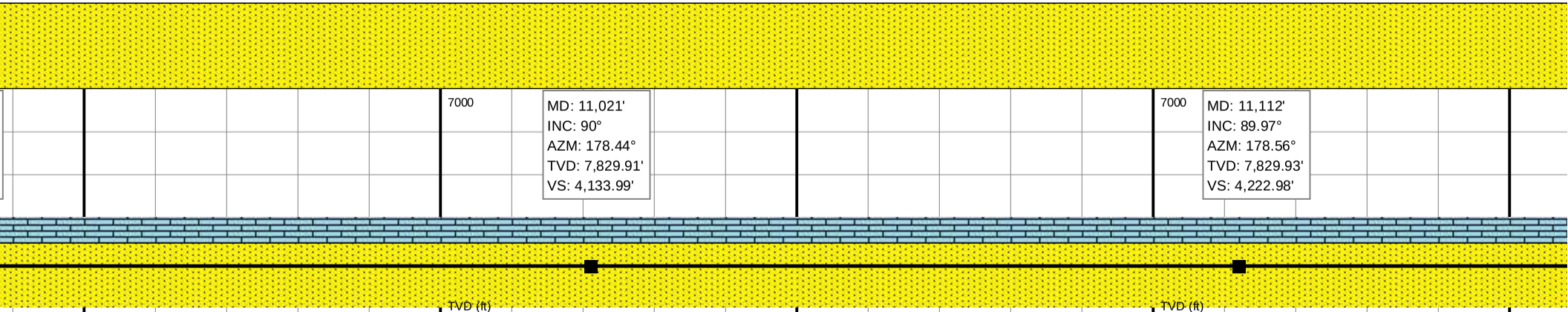


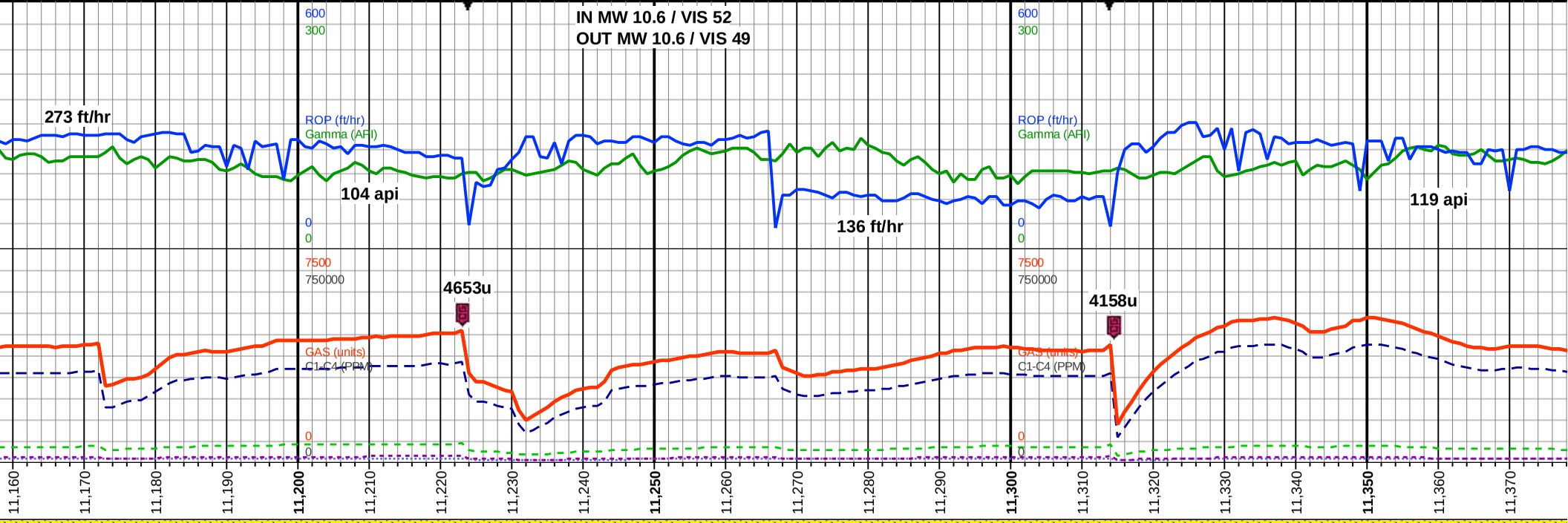


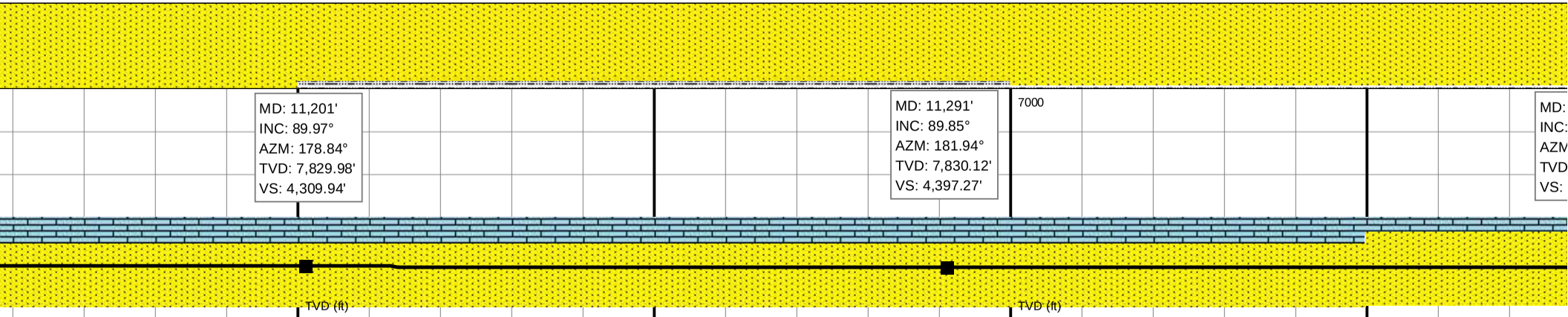


frm-hrd, occ fri, vfg, w rnd-sb rnd, w cons, mod srt, v
g slty ss

100% SS: drkgy brn-v drkgy, frm-v hrd, occ fri, vfg, w rnd-sb rnd, w cons, mod srt, v
arg mtx, slty txt, non-calc, grdg slty ss

100% SS: drkgy brn-v drkgy, frm-v hrd, occ fri, vfg
arg mtx, slty txt, non-calc, grdg slty ss, com con fr

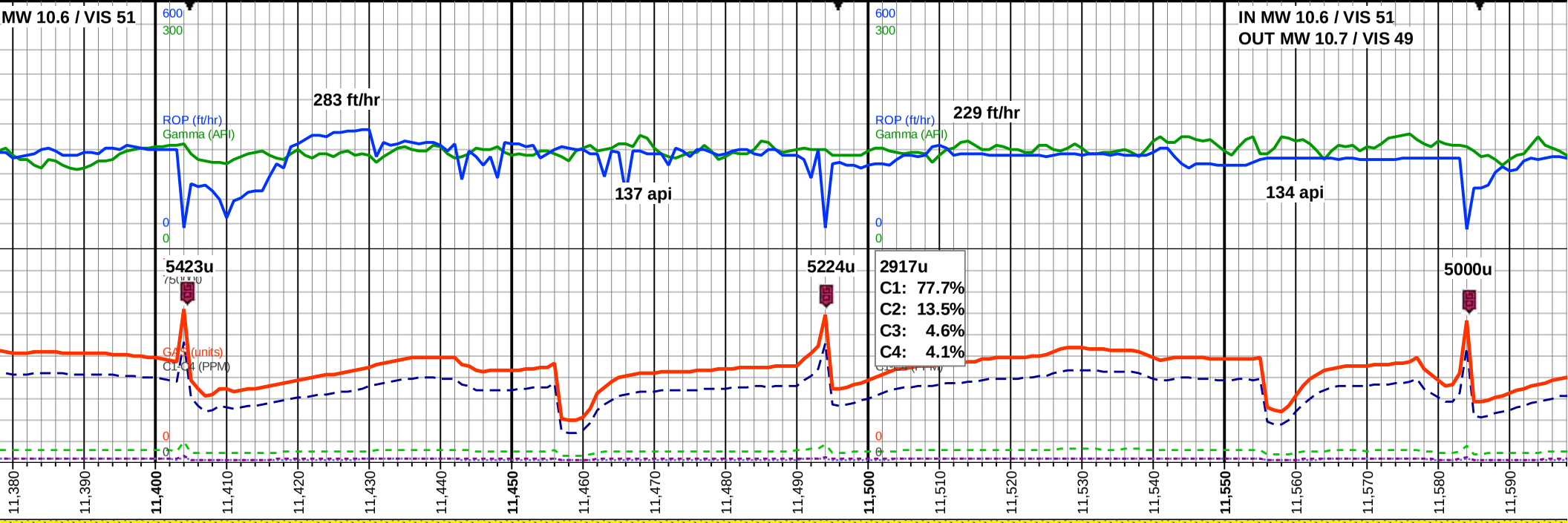


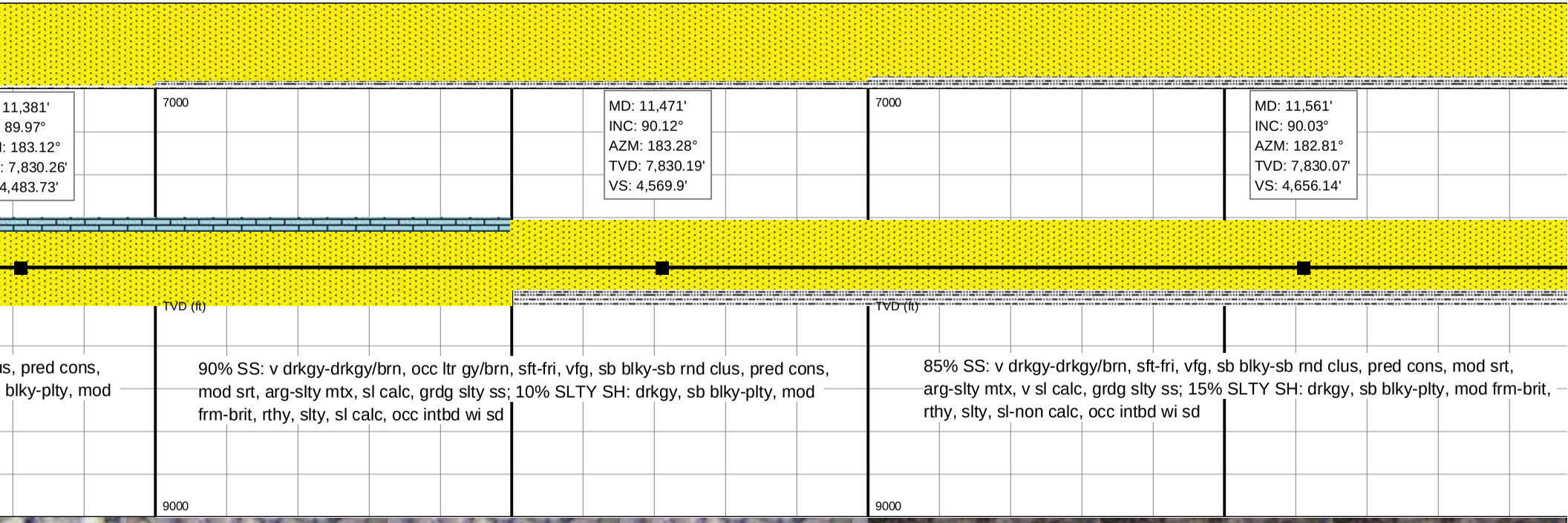


g, w rnd-sb rnd, w cons, mod srt, v
rom circ hi gas

90% SS: drkgy-drkgy/brn, occ ltr gy/brn, sft-fri, vfg, sb blky-sb rnd clus, pred cons, mod srt, arg-slty mtx, mod calc, grdg slty ss; 10% SLTY SH: drkgy, sb blky-sb fis, mod frm, rthy, slty, sl calc, occ intbd wi sd

95% SS: drkgy-drkgy/brn, occ ltr gy/brn, sft-fri, vfg, sb blky-sb rnd clu
mod srt, arg-slty mtx, mod calc, grdg slty ss; 5% SLTY SH: drkgy, sb
frm-brit, rthy, slty, sl calc, occ intbd wi sd





us, pred cons,
blky-plty, mod

90% SS: v drkgy-drkgy/brn, occ ltr gy/brn, sft-fri, vfg, sb blky-sb rnd clus, pred cons, mod srt, arg-slty mtx, sl calc, grdg slty ss; 10% SLTY SH: drkgy, sb blky-plty, mod frm-brit, rthy, slty, sl calc, occ intbd wi sd

85% SS: v drkgy-drkgy/brn, sft-fri, vfg, sb blky-sb rnd clus, pred cons, mod srt, arg-slty mtx, v sl calc, grdg slty ss; 15% SLTY SH: drkgy, sb blky-plty, mod frm-brit, rthy, slty, sl-non calc, occ intbd wi sd

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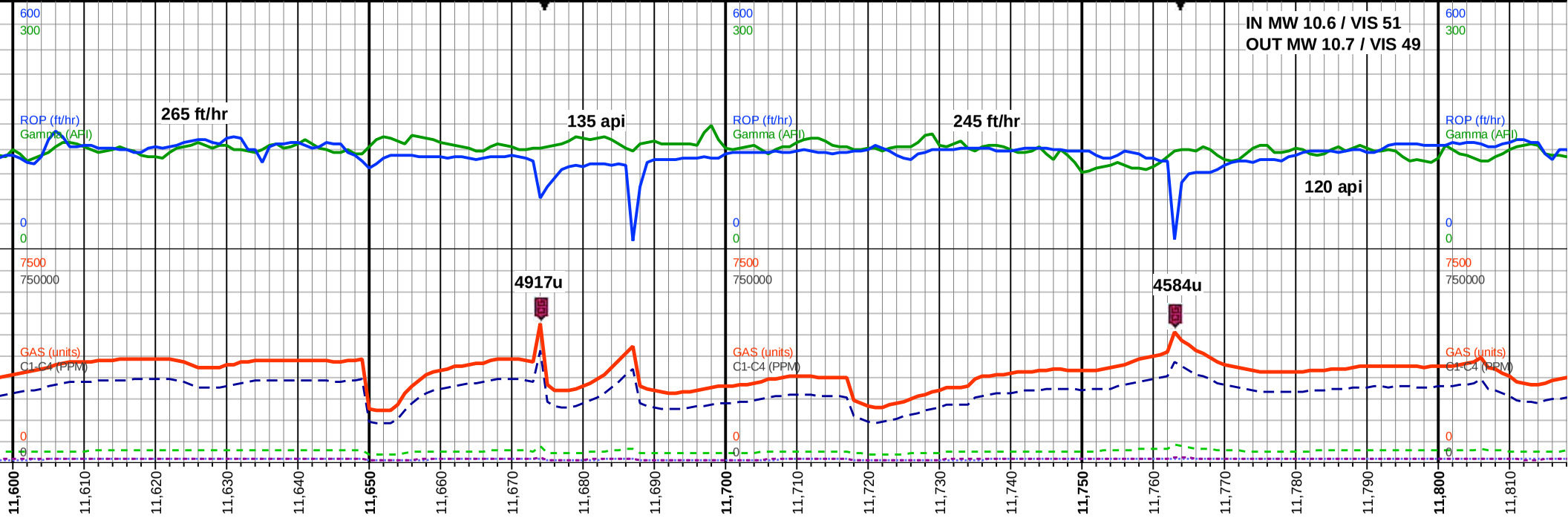
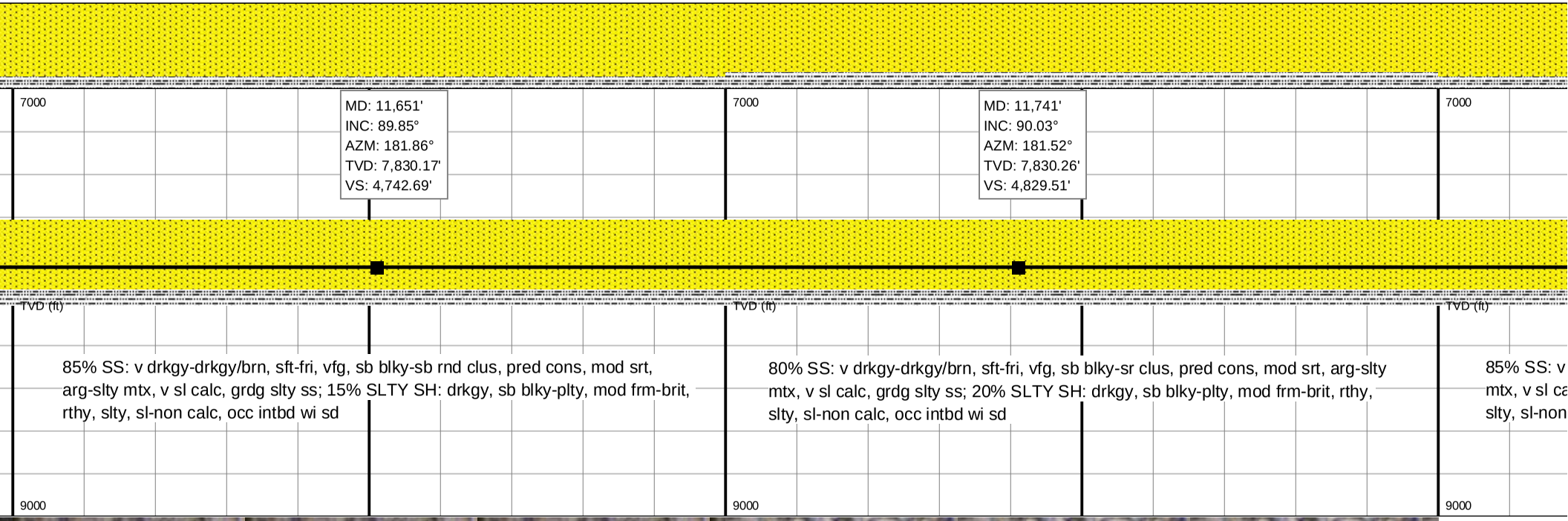
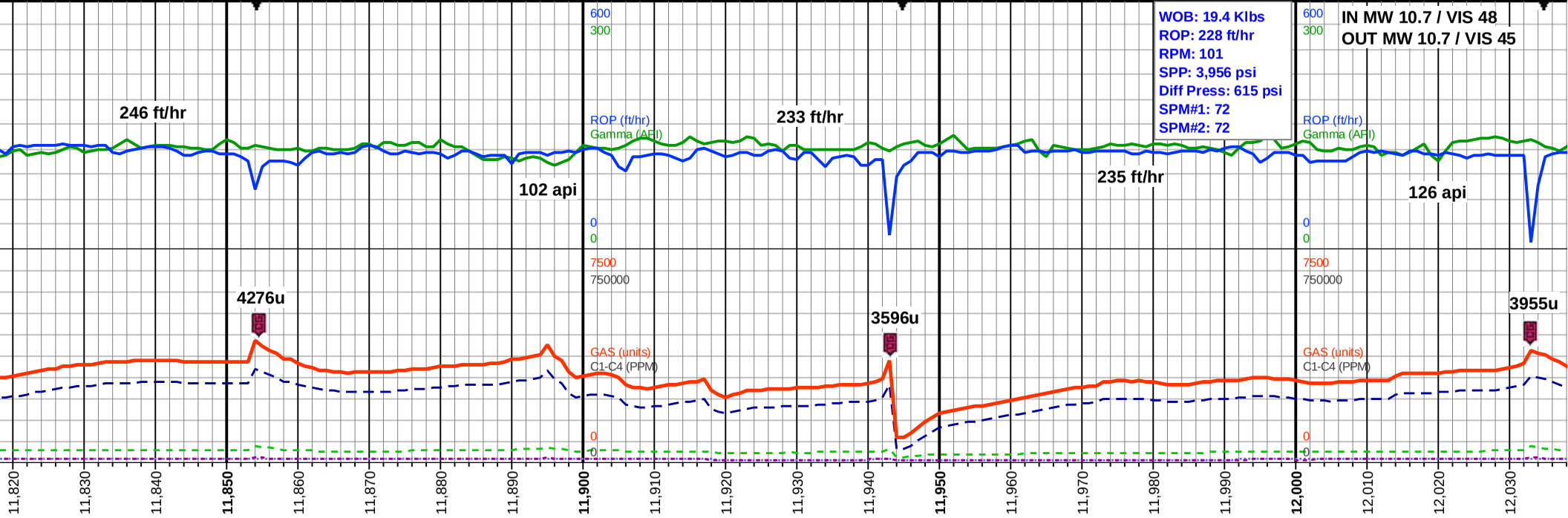


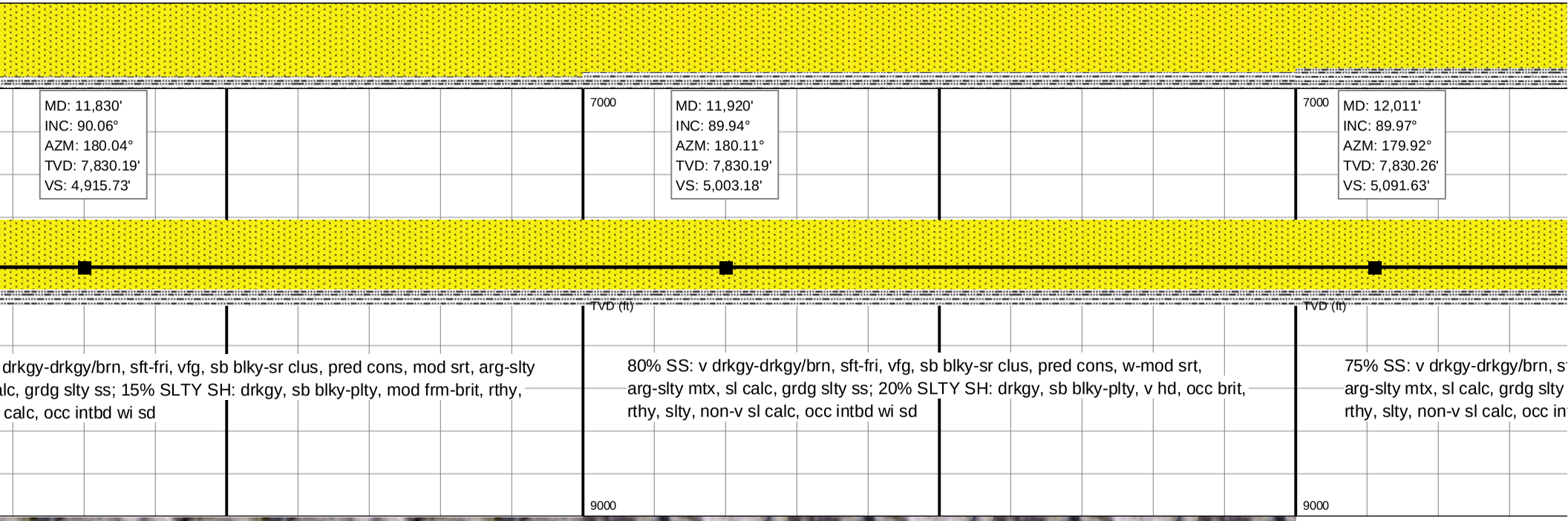


85% SS: v drkgy-drkgy/brn, sft-fri, vfg, sb blky-sb rnd clus, pred cons, mod srt, arg-slty mtx, v sl calc, grdg slty ss; 15% SLTY SH: drkgy, sb blky-plty, mod frm-brit, rthy, slty, sl-non calc, occ intbd wi sd

80% SS: v drkgy-drkgy/brn, sft-fri, vfg, sb blky-sr clus, pred cons, mod srt, arg-slty mtx, v sl calc, grdg slty ss; 20% SLTY SH: drkgy, sb blky-plty, mod frm-brit, rthy, slty, sl-non calc, occ intbd wi sd

85% SS: v
mtx, v sl ca
slty, sl-non

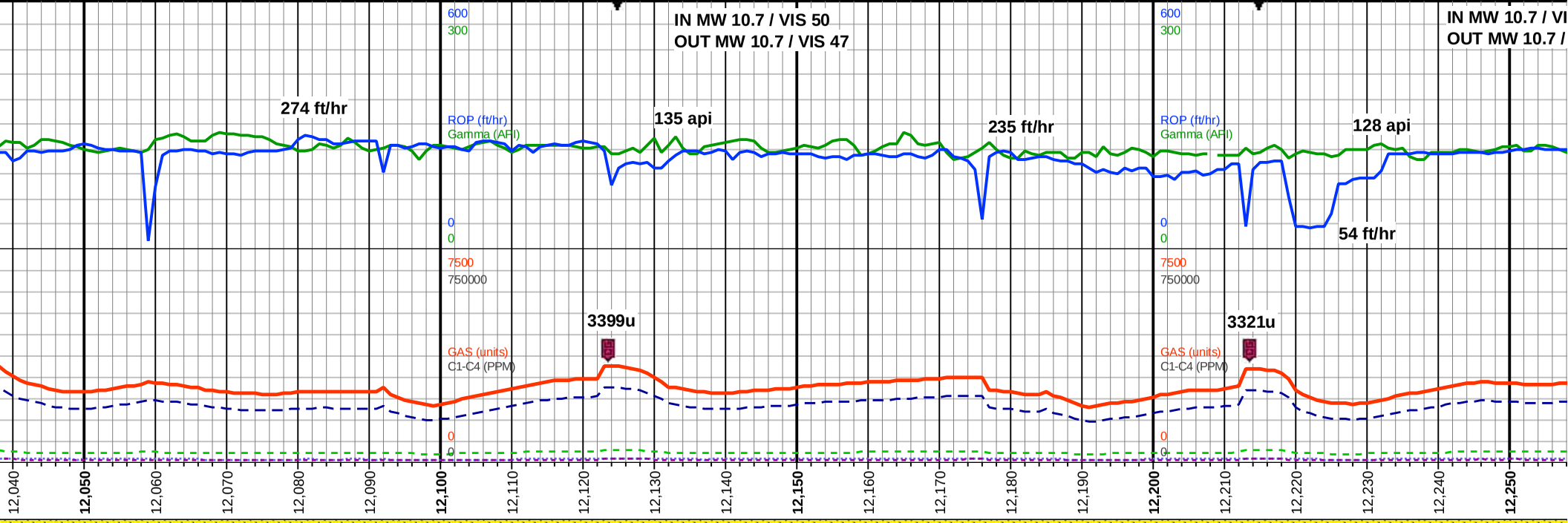


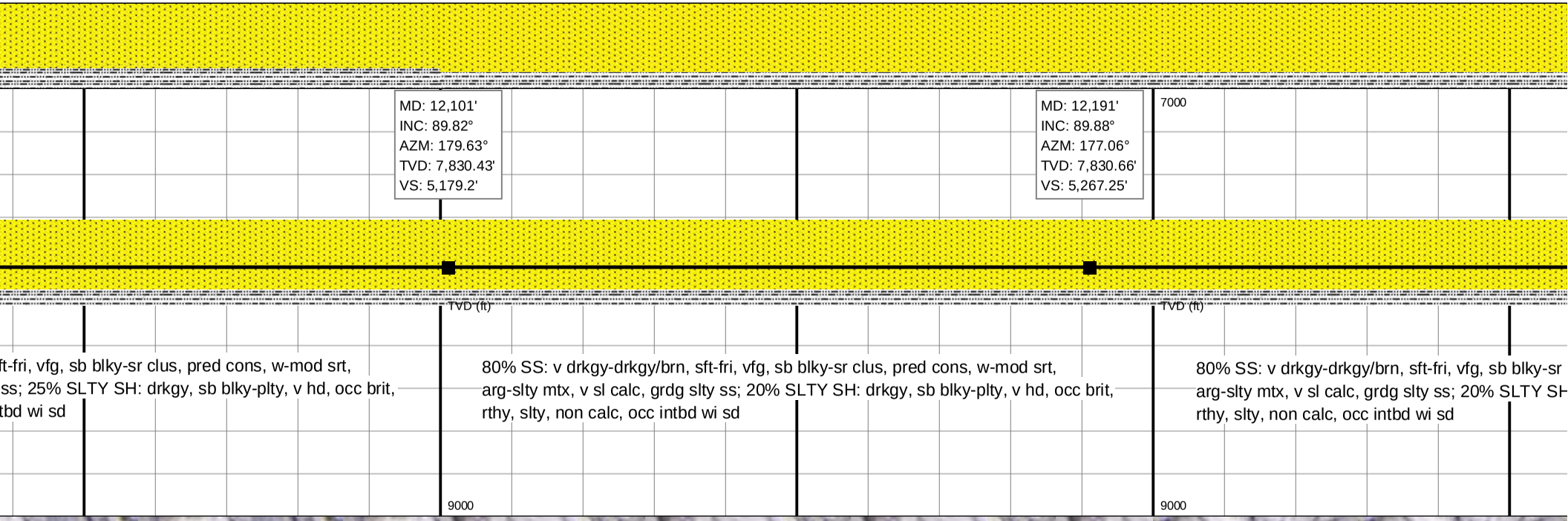


drkgy-drkgy/brn, sft-fri, vfg, sb blky-sr clus, pred cons, mod srt, arg-slty
alc, grdg slty ss; 15% SLTY SH: drkgy, sb blky-plty, mod frm-brit, rthy,
calc, occ intbd wi sd

80% SS: v drkgy-drkgy/brn, sft-fri, vfg, sb blky-sr clus, pred cons, w-mod srt, arg-slty mtx, sl calc, grdg slty ss; 20% SLTY SH: drkgy, sb blky-plty, v hd, occ brit, rthy, slty, non-v sl calc, occ intbd wi sd

75% SS: v drkgy-drkgy/brn, s
arg-slty mtx, sl calc, grdg slty
rthy, slty, non-v sl calc, occ in

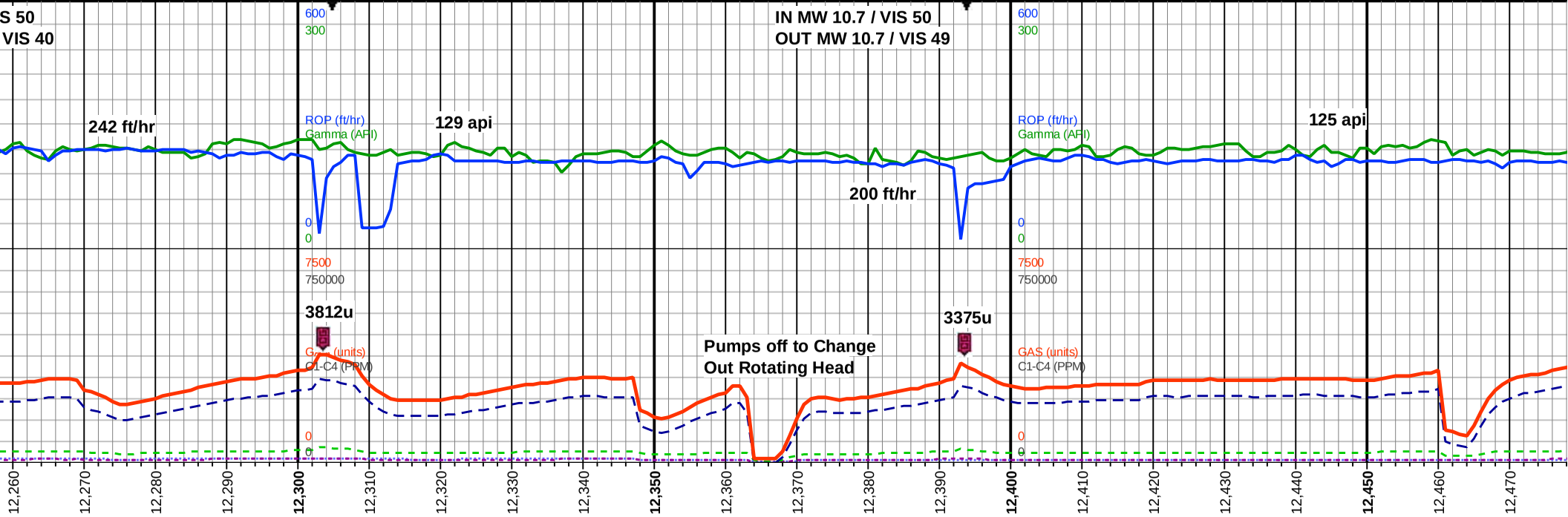


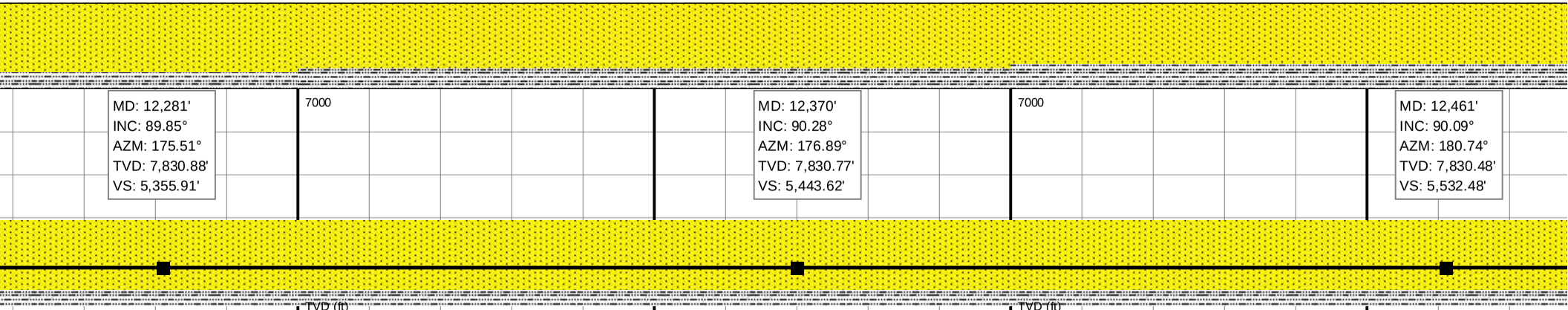


ft-fri, vfg, sb blky-sr clus, pred cons, w-mod srt,
ss; 25% SLTY SH: drkgy, sb blky-plty, v hd, occ brit,
tbd wi sd

80% SS: v drkgy-drkgy/brn, sft-fri, vfg, sb blky-sr clus, pred cons, w-mod srt,
arg-slty mtx, v sl calc, grdg slty ss; 20% SLTY SH: drkgy, sb blky-plty, v hd, occ brit,
rthy, slty, non calc, occ intbd wi sd

80% SS: v drkgy-drkgy/brn, sft-fri, vfg, sb blky-sr
arg-slty mtx, v sl calc, grdg slty ss; 20% SLTY SH
rthy, slty, non calc, occ intbd wi sd





clus, pred cons, w-mod srt,
l: drkgy, sb blky-plty, v hd, occ brit,

75% SS: drkgy-drkgy/brn, sme medgy cly cmt, sft-fri, vfg, sb blky-sr clus, pred cons, mod srt, arg-slty mtx, sl calc, grdg slty ss; 25% SLTY SH: drkgy, sb blky-plty, v hd, occ brit, rthy, slty, non-v sl calc, occ intbd wi sd

70% SS: drkgy-drkgy/brn, sft-fri, vfg, sb blky-sr clus, pred cons, mo
mtx, sl calc, grdg slty ss; 30% SLTY SH: drkgy, ip blk, sb blky-plty-s
brit, rthy, slty, arg, non-v sl calc, occ intbd wi sd

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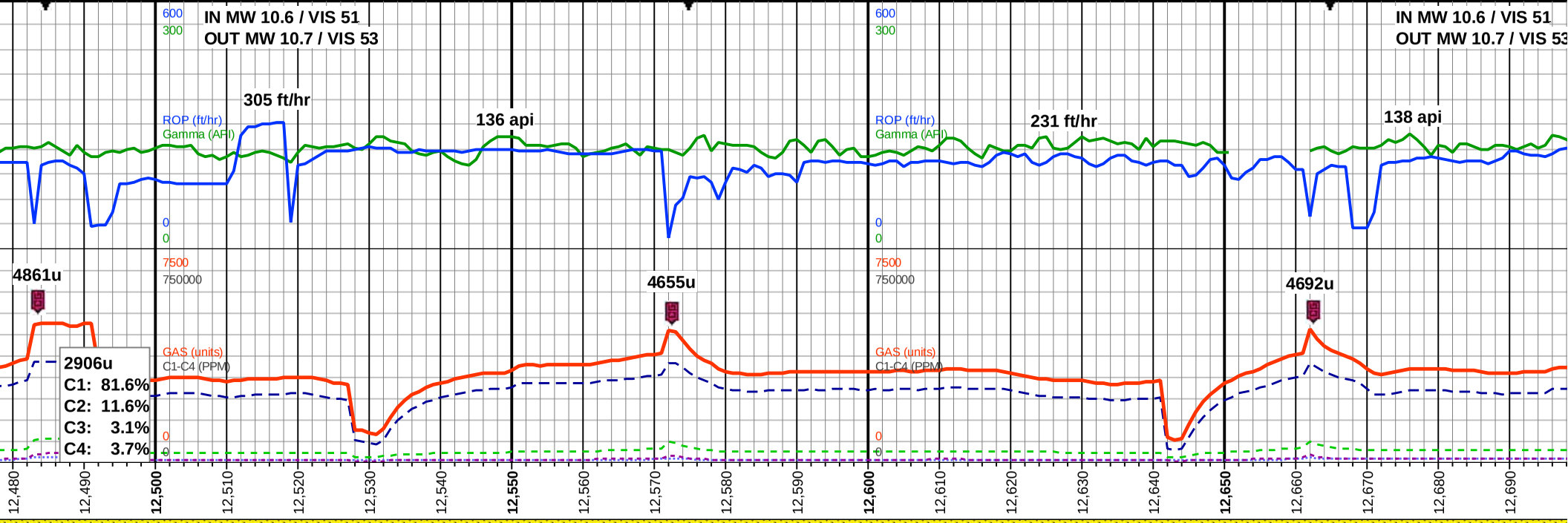
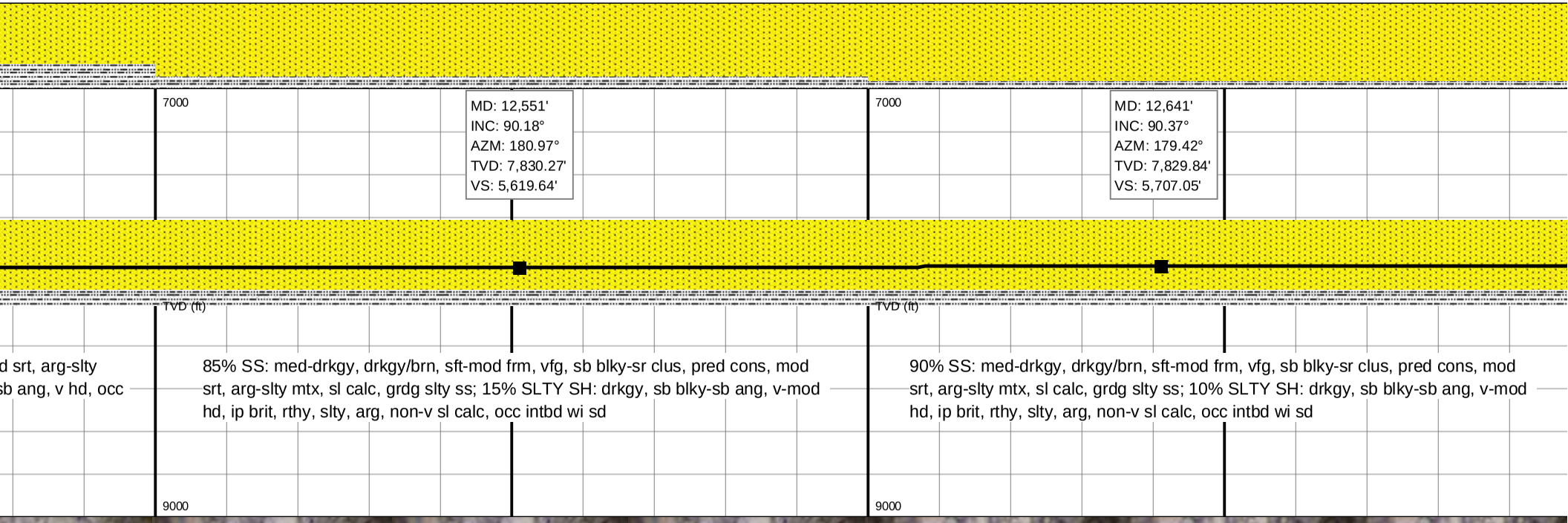
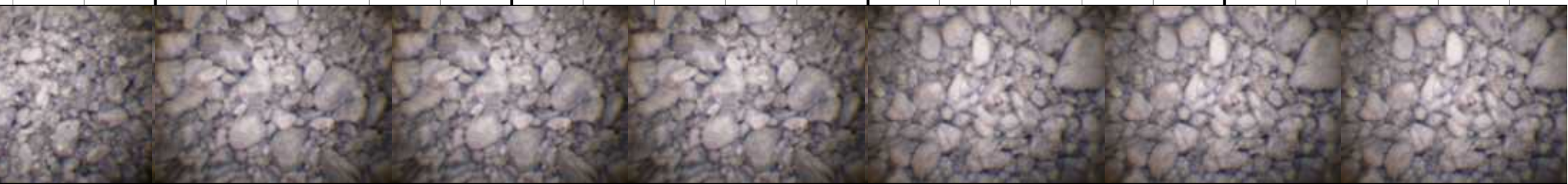


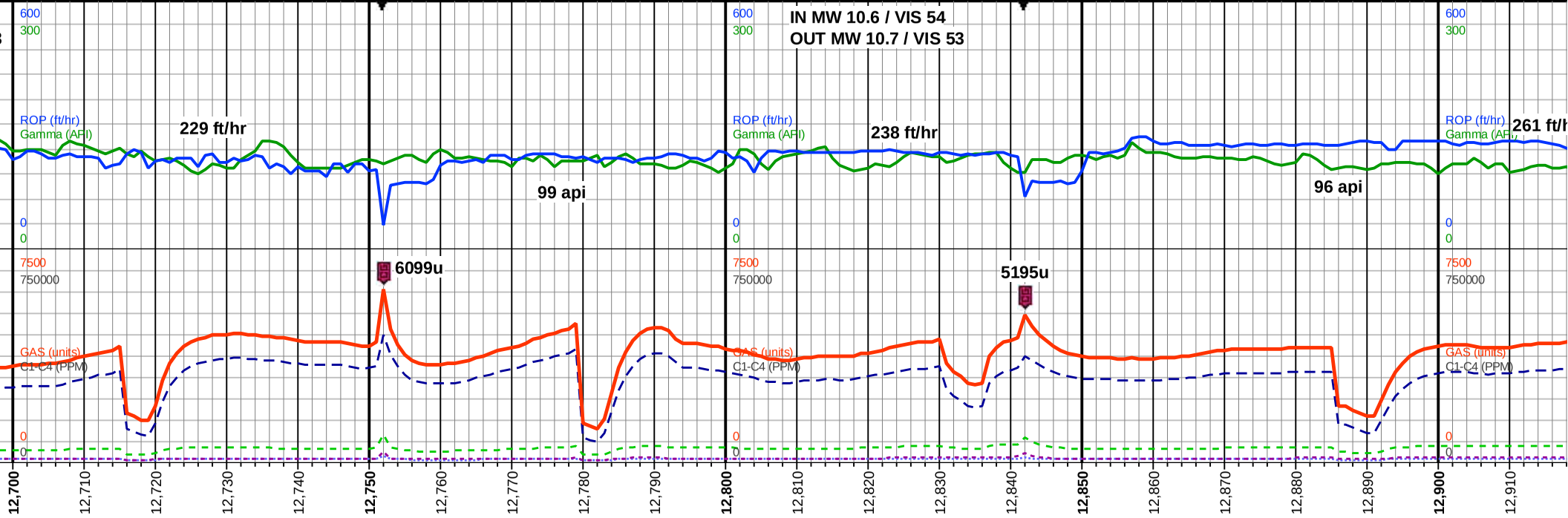


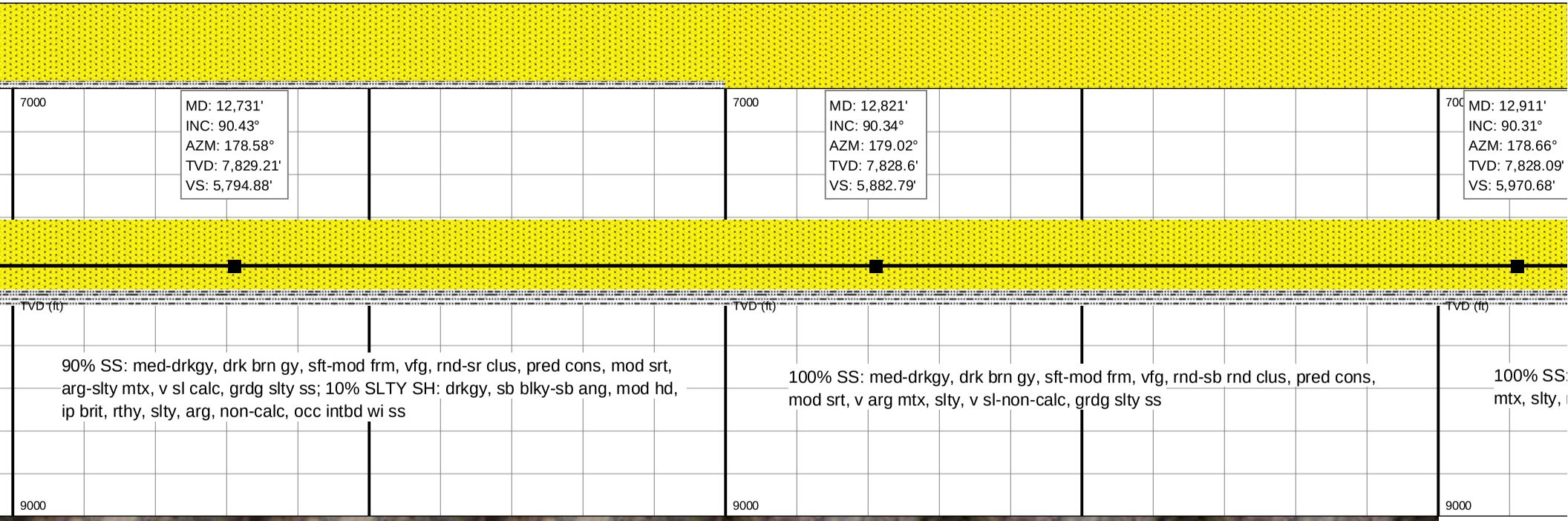
d srt, arg-slty
sb ang, v hd, occ

85% SS: med-drkgy, drkgy/brn, sft-mod frm, vfg, sb blky-sr clus, pred cons, mod srt, arg-slty mtx, sl calc, grdg slty ss; 15% SLTY SH: drkgy, sb blky-sb ang, v-mod hd, ip brit, rthy, slty, arg, non-v sl calc, occ intbd wi sd

90% SS: med-drkgy, drkgy/brn, sft-mod frm, vfg, sb blky-sr clus, pred cons, mod srt, arg-slty mtx, sl calc, grdg slty ss; 10% SLTY SH: drkgy, sb blky-sb ang, v-mod hd, ip brit, rthy, slty, arg, non-v sl calc, occ intbd wi sd



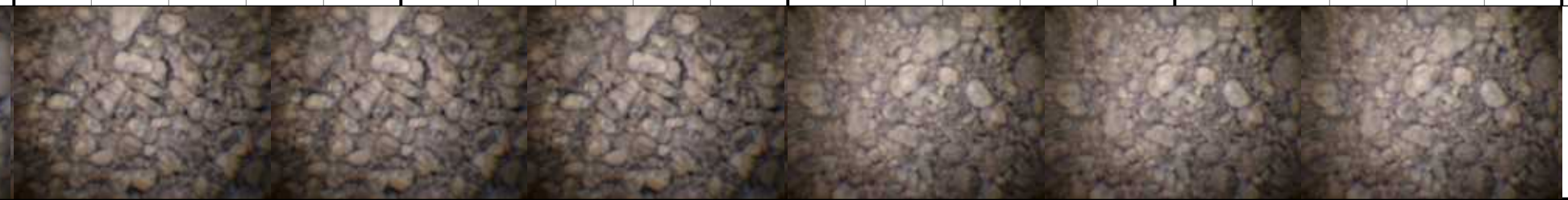


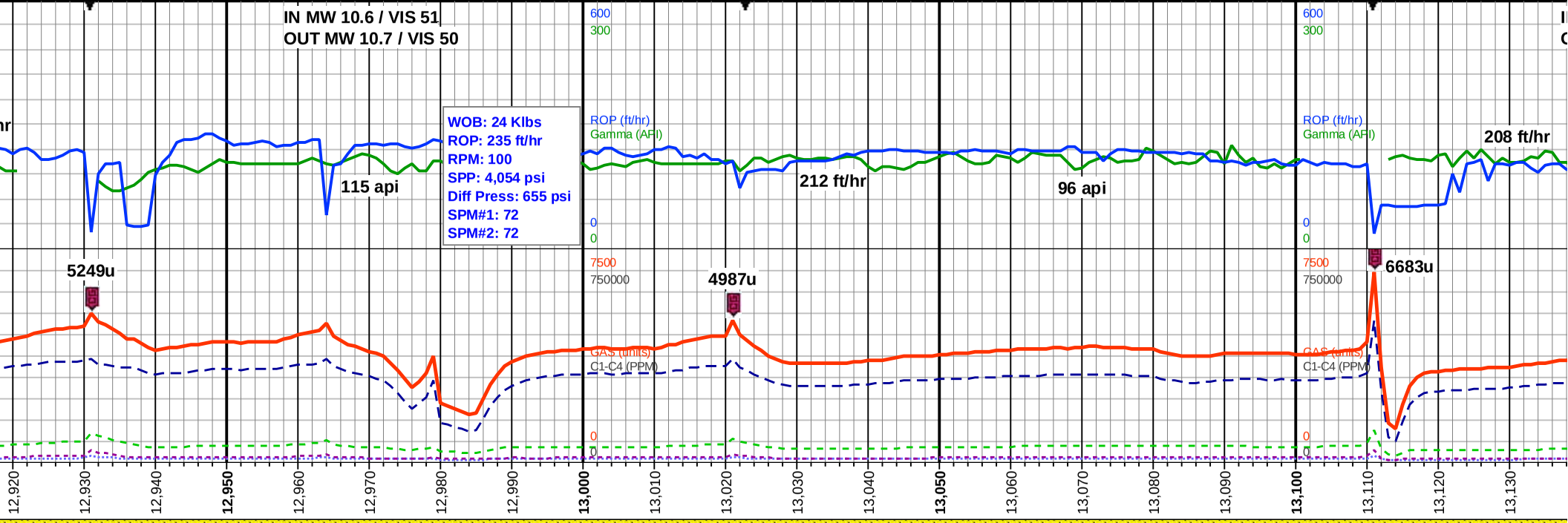


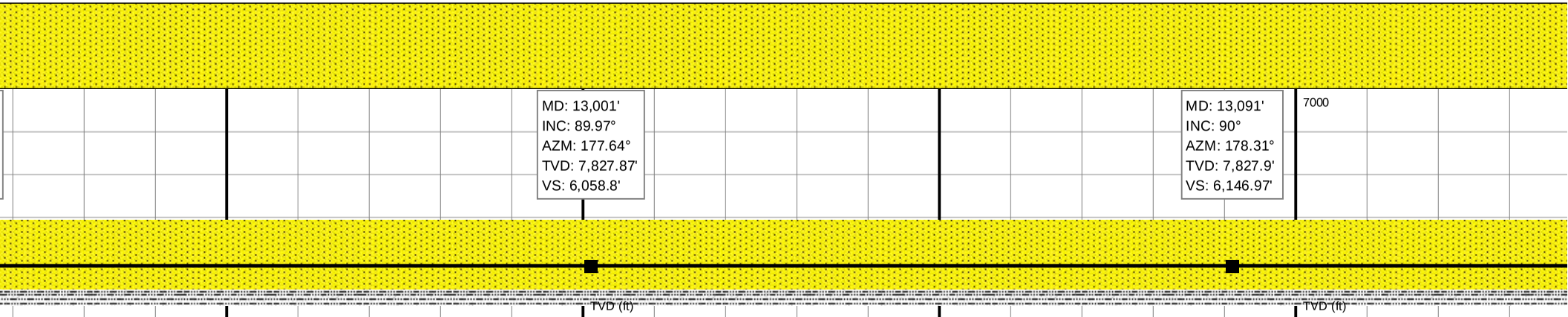
90% SS: med-drkgy, drk brn gy, sft-mod frm, vfg, rnd-sr clus, pred cons, mod srt, arg-slty mtx, v sl calc, grdg slty ss; 10% SLTY SH: drkgy, sb blky-sb ang, mod hd, ip brit, rthy, slty, arg, non-calc, occ intbd wi ss

100% SS: med-drkgy, drk brn gy, sft-mod frm, vfg, rnd-sb rnd clus, pred cons, mod srt, v arg mtx, slty, v sl-non-calc, grdg slty ss

100% SS
mtx, slty,



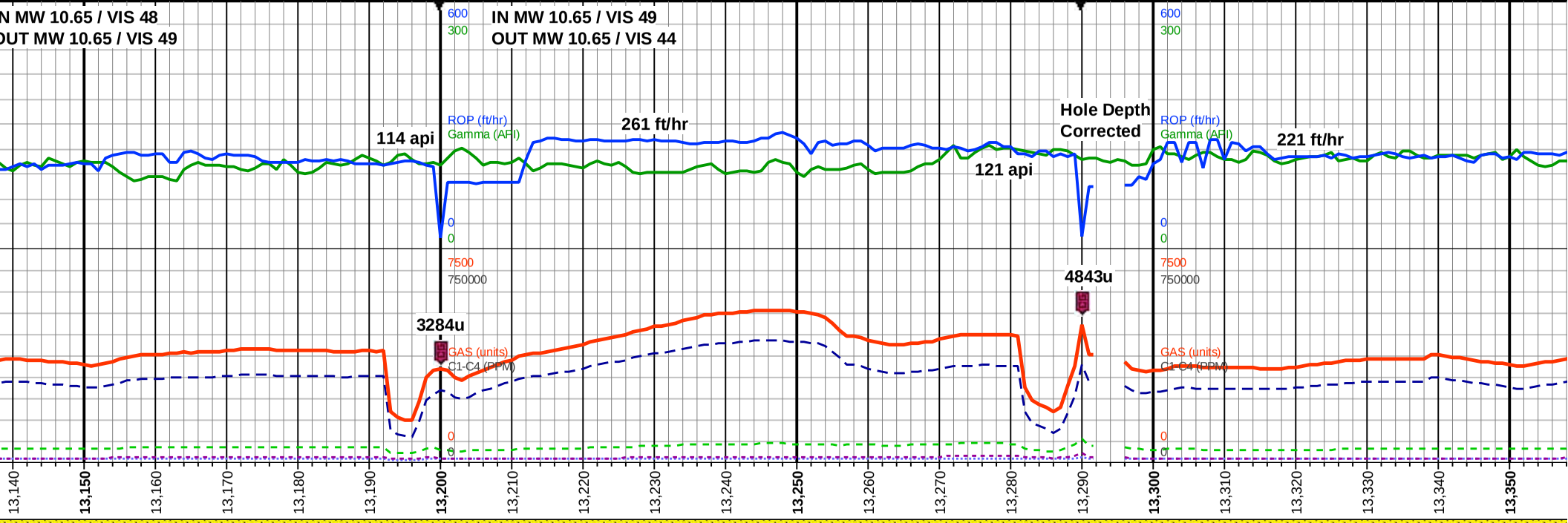


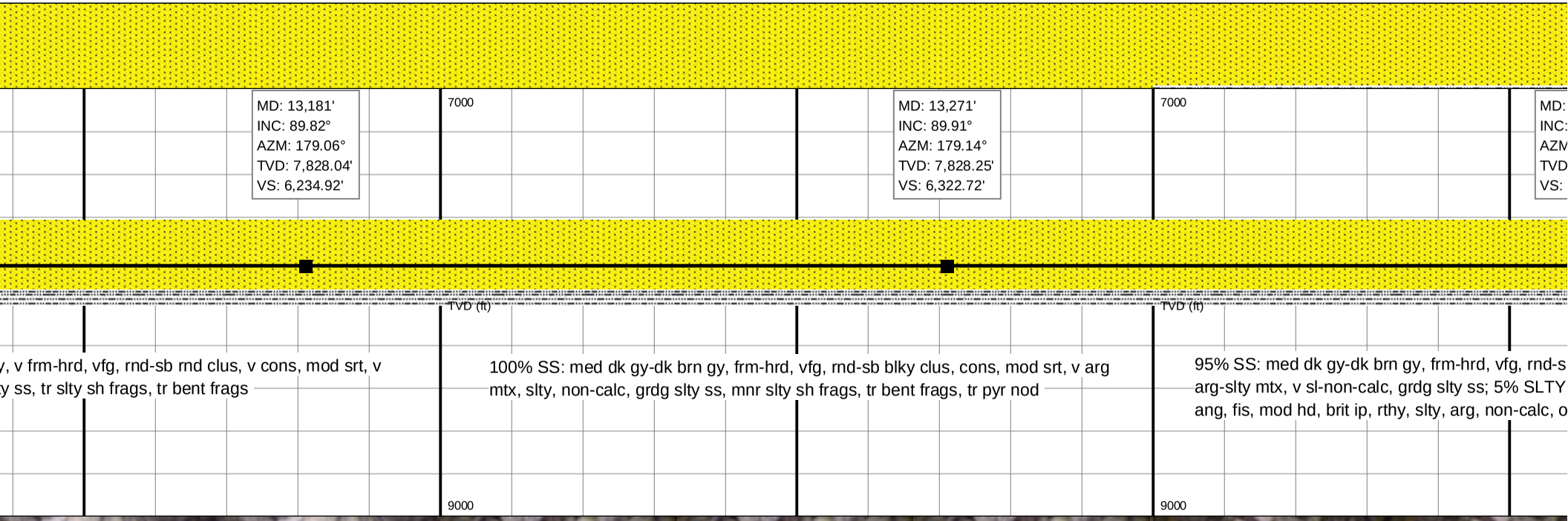


: med-drkgy, drk brn gy, frm-hrd, vfg, rnd-sb rnd clus, cons, mod srt, v arg non-calc, grdg slty ss, rr slty sh frags

100% SS: med-drkgy, drk brn gy, v frm-hrd, vfg, rnd-sb rnd clus, v cons, mod srt, v arg mtx, slty, non-calc, grdg slty ss, mnr slty sh frags

100% SS: med dk gy-dk brn gy arg mtx, slty, non-calc, grdg slt

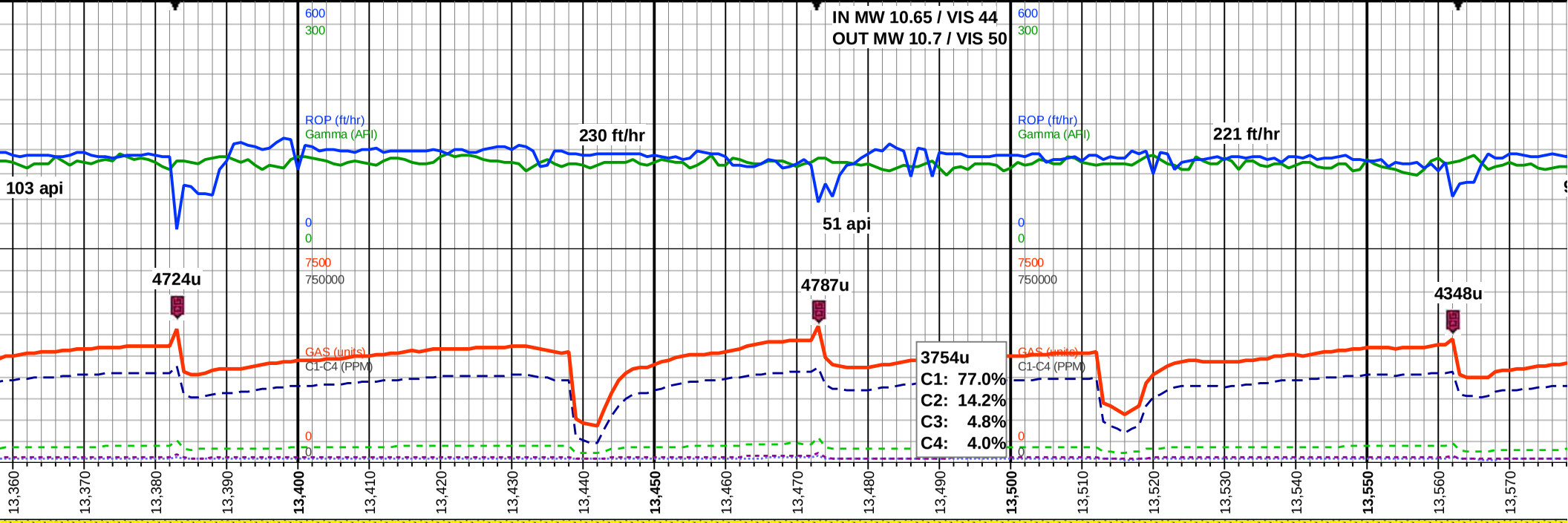


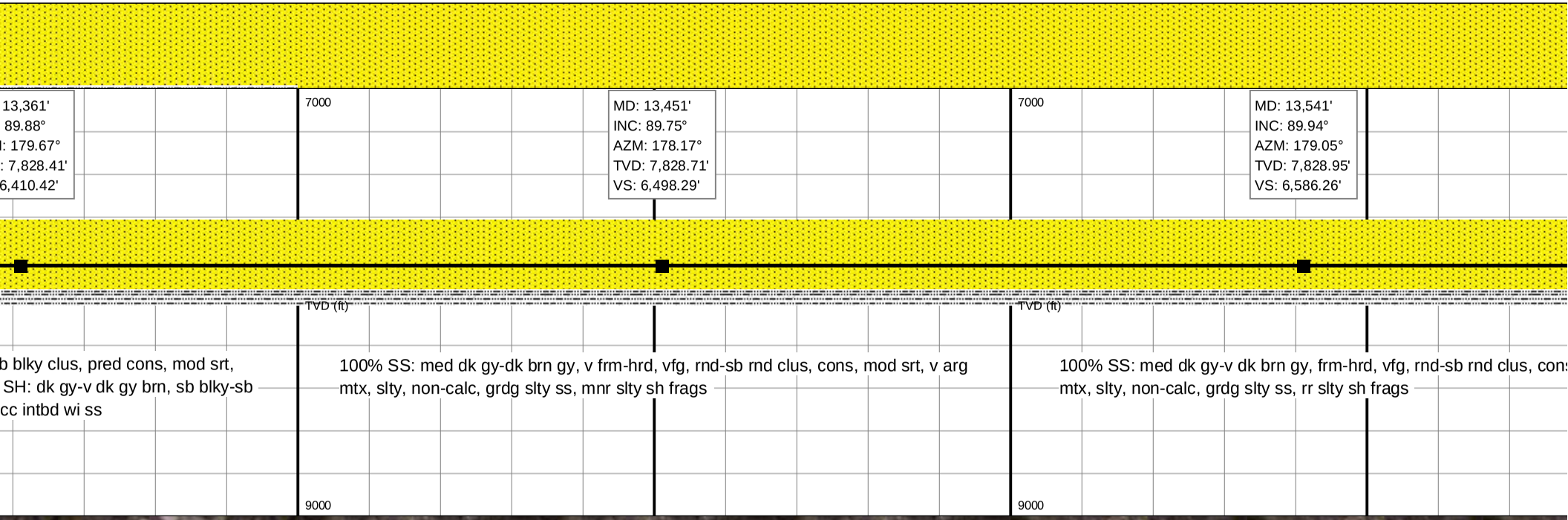


y, v frm-hrd, vfg, rnd-sb rnd clus, v cons, mod srt, v
y ss, tr slty sh frags, tr bent frags

100% SS: med dk gy-dk brn gy, frm-hrd, vfg, rnd-sb blky clus, cons, mod srt, v arg
mtx, slty, non-calc, grdg slty ss, mnr slty sh frags, tr bent frags, tr pyr nod

95% SS: med dk gy-dk brn gy, frm-hrd, vfg, rnd-s
arg-slty mtx, v sl-non-calc, grdg slty ss; 5% SLTY
ang, fis, mod hd, brit ip, rthy, slty, arg, non-calc, o





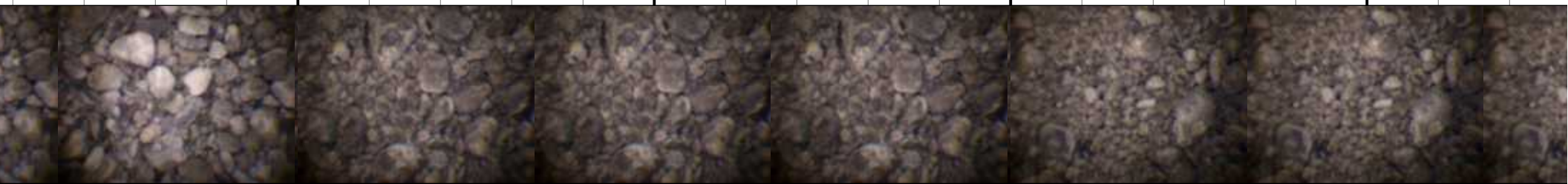
b blky clus, pred cons, mod srt,
SH: dk gy-v dk gy brn, sb blky-sb
cc intbd wi ss

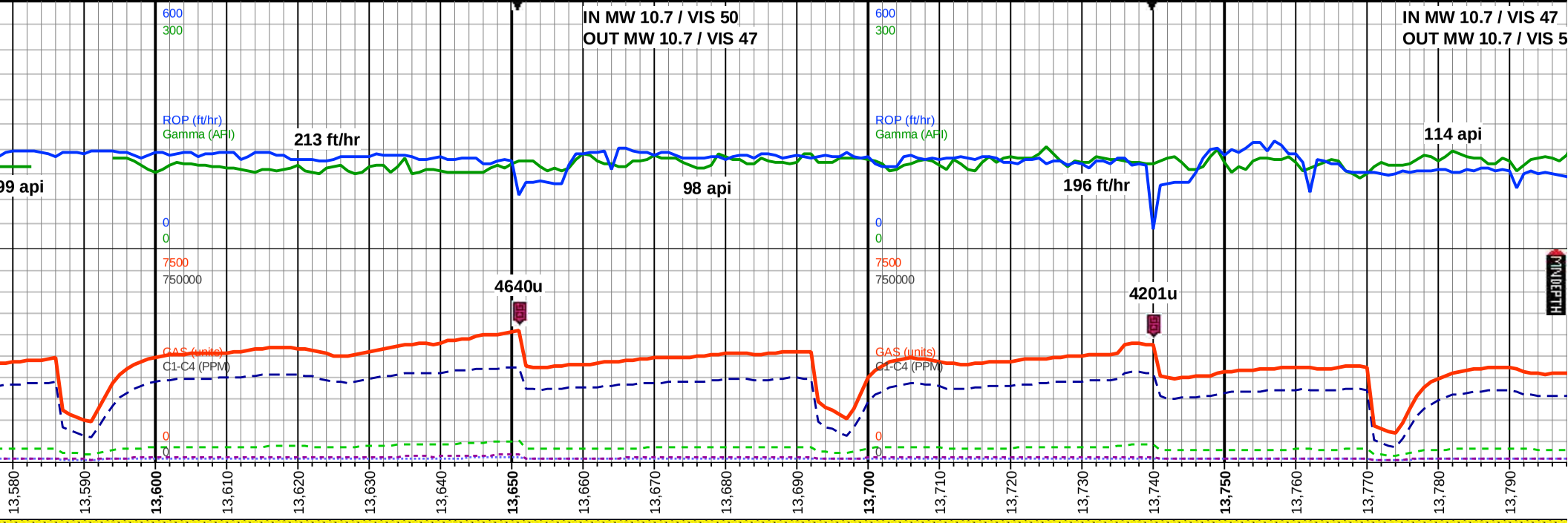
100% SS: med dk gy-dk brn gy, v frm-hrd, vfg, rnd-sb rnd clus, cons, mod srt, v arg mtx, slty, non-calc, grdg slty ss, mnr slty sh frags

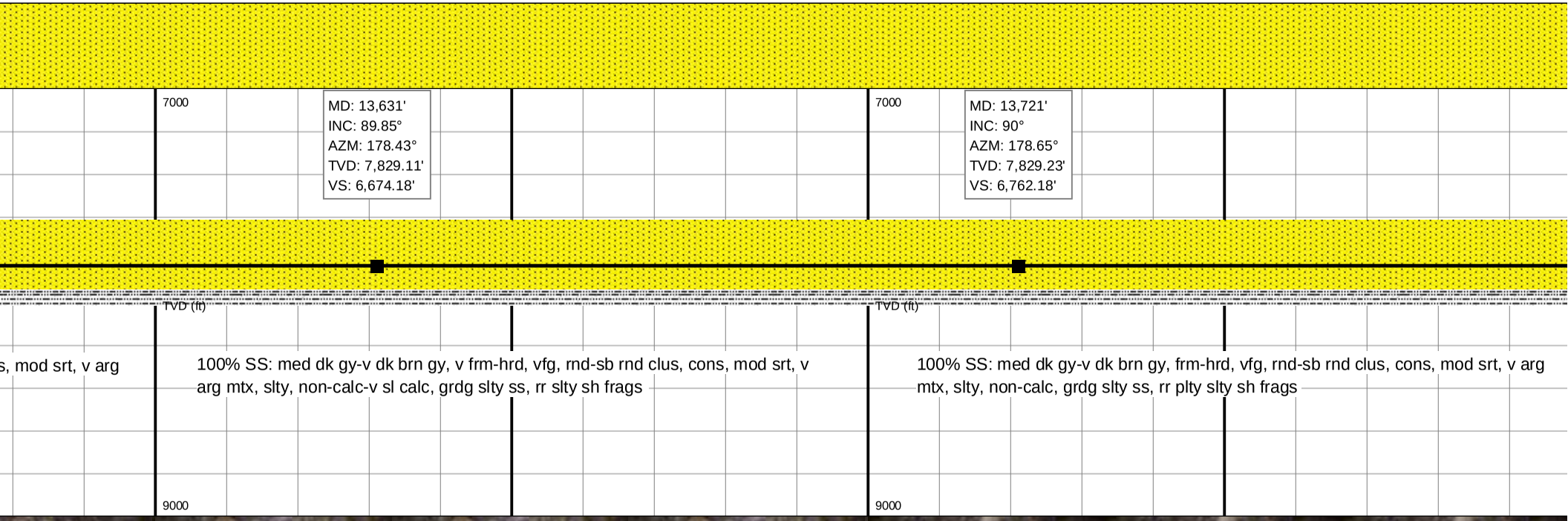
100% SS: med dk gy-v dk brn gy, frm-hrd, vfg, rnd-sb rnd clus, cons mtx, slty, non-calc, grdg slty ss, rr slty sh frags

9000

9000







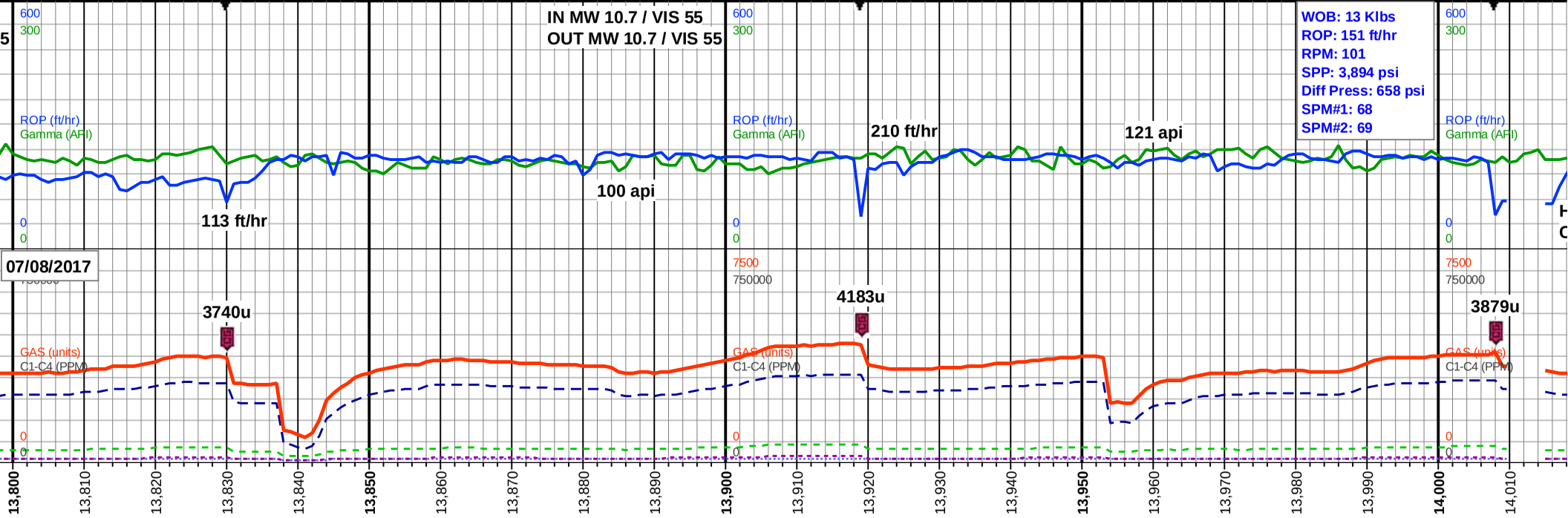
s, mod srt, v arg

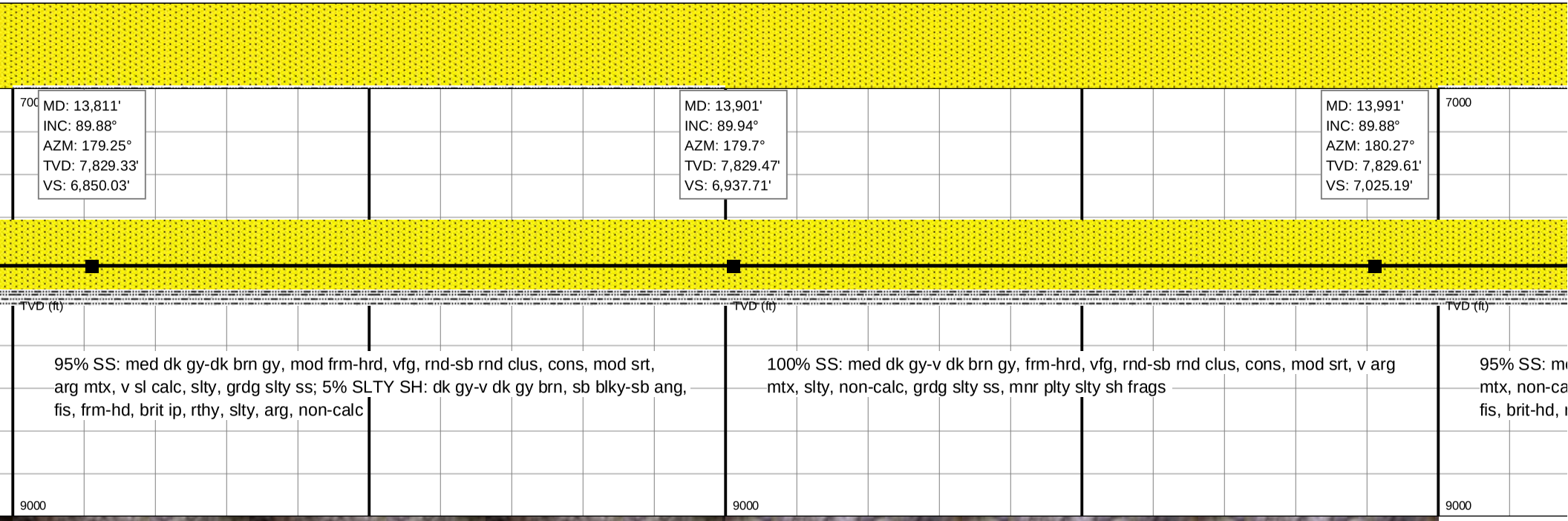
100% SS: med dk gy-v dk brn gy, v frm-hrd, vfg, rnd-sb rnd clus, cons, mod srt, v arg mtx, slty, non-calc-v sl calc, grdg slty ss, rr slty sh frags

100% SS: med dk gy-v dk brn gy, frm-hrd, vfg, rnd-sb rnd clus, cons, mod srt, v arg mtx, slty, non-calc, grdg slty ss, rr plty slty sh frags

9000

9000

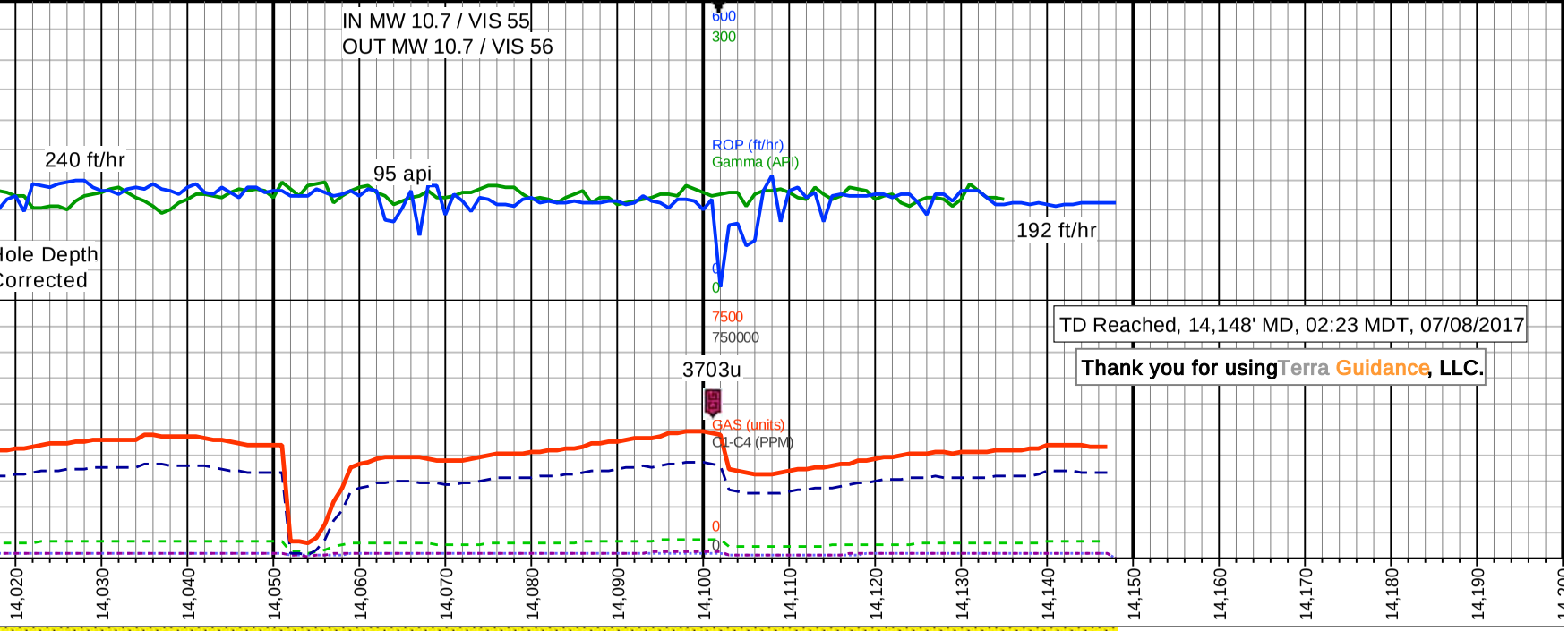




95% SS: med dk gy-dk brn gy, mod frm-hrd, vfg, rnd-sb rnd clus, cons, mod srt, arg mtx, v sl calc, slty, grdg slty ss; 5% SLTY SH: dk gy-v dk gy brn, sb blky-sb ang, fis, frm-hd, brit ip, rthy, slty, arg, non-calc

100% SS: med dk gy-v dk brn gy, frm-hrd, vfg, rnd-sb rnd clus, cons, mod srt, v arg mtx, slty, non-calc, grdg slty ss, mnr plty slty sh frags

95% SS: m
mtx, non-ca
fis, brit-hd,


IN MW 10.7 / VIS 55
OUT MW 10.7 / VIS 56
600
300
ROP (ft/hr)
Gamma (API)
240 ft/hr
95 api
192 ft/hr
Hole Depth
Corrected
0
0
7500
750000
TD Reached, 14,148' MD, 02:23 MDT, 07/08/2017
Thank you for usingTerra Guidance, LLC.
3703u
GAS (units)
C1-C4 (PPM)
0
0
14,020
14,030
14,040
14,050
14,060
14,070
14,080
14,090
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14,110
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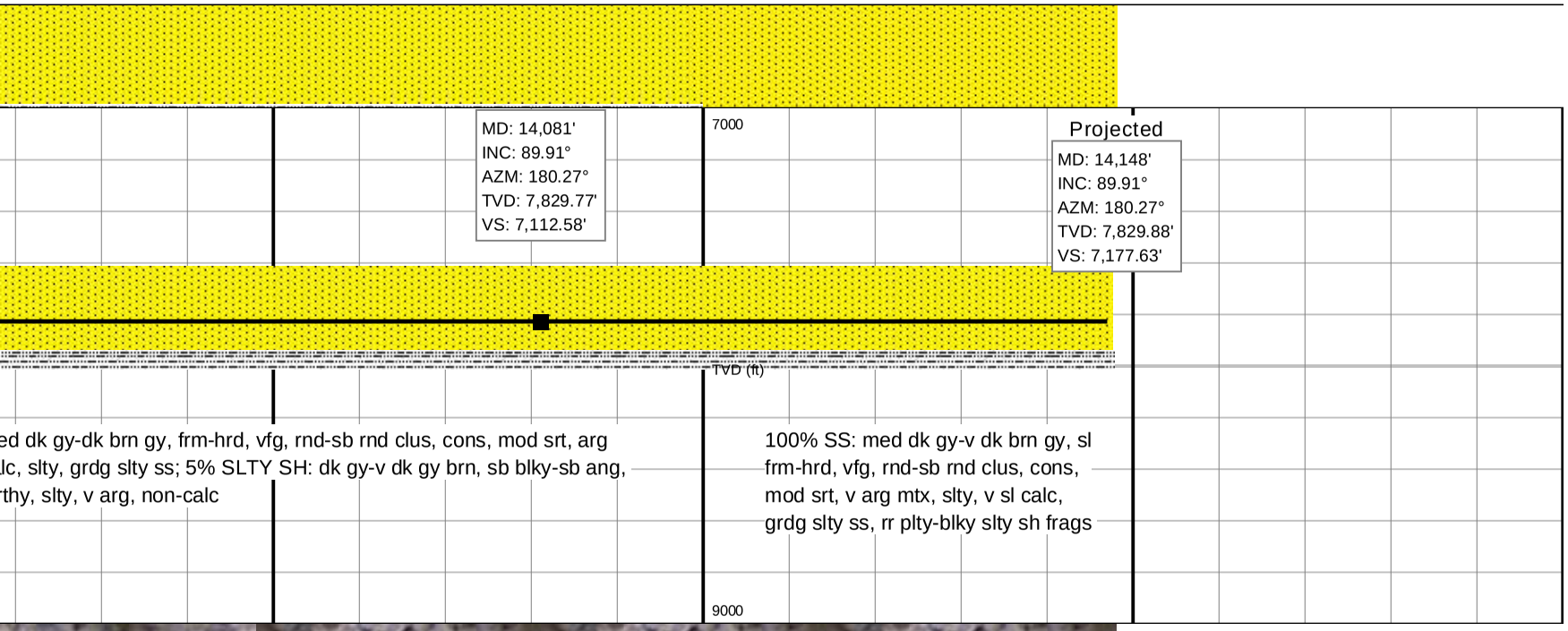
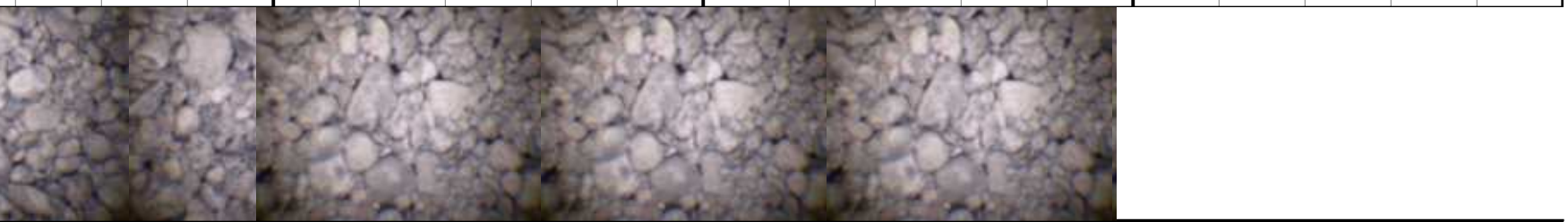
14,160
14,170
14,180
14,190


MD: 14,081'
INC: 89.91°
AZM: 180.27°
TVD: 7,829.77'
VS: 7,112.58'
7000
Projected
MD: 14,148'
INC: 89.91°
AZM: 180.27°
TVD: 7,829.88'
VS: 7,177.63'
TVD (ft)
ed dk gy-dk brn gy, frm-hrd, vfg, rnd-sb rnd clus, cons, mod srt, arg
lc, slty, grdg slty ss; 5% SLTY SH: dk gy-v dk gy brn, sb blky-sb ang,
rthy, slty, v arg, non-calc
100% SS: med dk gy-v dk brn gy, sl
frm-hrd, vfg, rnd-sb rnd clus, cons,
mod srt, v arg mtx, slty, v sl calc,
grdg slty ss, rr plty-blky slty sh frags
9000